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THESIS

**INTERSERVICE RIVALRY, MISSION
CONSOLIDATION AND ISSUES OF READINESS
IN THE DOD: A CASE STUDY OF U.S. NAVY
EA-6B JOINT-SERVICE EXPEDITIONARY
SQUADRONS**

by

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September, 1996

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**INTERSERVICE RIVALRY, MISSION CONSOLIDATION AND ISSUES
OF READINESS IN THE DOD: A CASE STUDY OF U.S. NAVY EA-6B
JOINT-SERVICE EXPEDITIONARY SQUADRONS**

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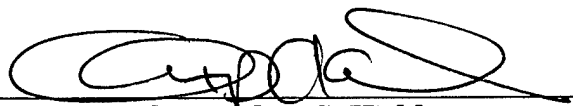
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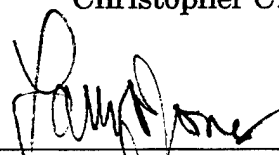
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ABSTRACT

This thesis provides an in-depth analysis of interservice rivalry and the roles and missions debate, the trend towards jointness and mission consolidation within the Department of Defense, and their effects on issues of logistics, funding and readiness. A case study of recently established EA-6B *Prowler* Joint-Service Expeditionary Squadrons organized to replace the Air Force EF-111A *Raven* highlights the implications of mission competition and consolidation in the post-Cold War era and serves as the focal point for analysis in the areas of logistics, funding and readiness. This study begins with a review of interservice rivalry, jointness and mission consolidation providing both historical and current examples. The case study of the Joint-Service Expeditionary Squadrons covers initial planning and organization through recent developments and progress toward Navy assumption of the electronic warfare mission for the Department of Defense. Finally, an analysis of logistics, funding and readiness based on the case study is presented. The thesis concludes with a summary of findings, proposed areas for continued research and concluding remarks.

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I. INTRODUCTION

A. BACKGROUND

During the 1990s, increased international commitments, primarily for United Nations and other peacekeeping operations, decreased budgetary authority, and greater congressional oversight to encourage jointness of U.S. military operations has forced the Department of Defense to consider mission consolidation and increased joint-service operations. Budget austerity and defense drawdowns have occurred numerous times during the 20th century, and each has increased interservice rivalry and mission competition. This is particularly true for the post-Cold War defense establishment.

In a landmark Senate floor speech, Senator Sam Nunn (D-GA) called for the end to alleged unnecessary and wasteful duplication within the Department of Defense. Senator Nunn suggested that missions performed by two or more services be consolidated into single missions. In May, 1995 the Commission on Roles and Missions of the Armed Forces delivered findings that also suggested consolidation of several missions under a single platform or service. The Secretary of Defense concurred with many of these recommendations and a new era of mission consolidation within the DOD began.

One such consolidation has occurred in area of airborne electronic warfare. The Air Force has begun phasing out the fleet of EF-111A *Raven* jammer aircraft, while the Navy has begun "standing up" five new squadrons of EA-6B *Prowler* electronic attack aircraft to assume the Air Force

Suppression of Enemy Air Defenses (SEAD) mission. The new Joint-Service Expeditionary Squadrons will be manned by both Navy and Air Force aircrew, but will fall under the command authority of the Navy. When deployed in support of land-based operations, the joint squadrons will be under the operational control of the regional Commander in Chief (CINC), but will be administratively controlled by the Navy.

The trend towards joint-service operations and mission consolidation has raised questions regarding budgeting, logistics, and most importantly readiness within the Department of Defense and military departments and services. An analysis of the mission conversion dynamics for the new joint-service squadrons will provide insight into some of the effects of mission consolidation.

B. OBJECTIVES AND SCOPE

This thesis is divided into three parts. First, an overview and history of interservice rivalry and the roles and missions debate will be provided to identify historical trends. Additionally, a general analysis of jointness and the move toward combined military operations and mission consolidation will be discussed to provide background on post-Cold War trends. Second, a case study of the new EA-6B Joint-Service Expeditionary Squadrons will provide a more specific assessment of lessons learned and future expectations for mission consolidation within the Department of Defense. Finally, an analysis of the effects of mission consolidation on logistics considerations, funding and military readiness will be presented.

C. RESEARCH QUESTIONS

The following research questions are addressed in this thesis:

Primary: What impact does interservice rivalry and the trend toward jointness and mission consolidation have on logistics, budgets, and readiness?

Secondary: What effects have the Key West Agreement (1948), Defense Reorganization Acts of 1953 and 1958, the Goldwater-Nichols Defense Reorganization Act of 1986, and the Report of the Commission on Roles and Missions of the Armed Forces (1995) had on logistics, budgets, and readiness?

What are the advantages and disadvantages of Navy joint-service EA-6B squadrons supporting Air Force operations from land-based installations?

What are the possible long-term implications with respect to mission consolidation of increased levels of mission competition and decreased budgetary authority available for defense operations?

Is mission consolidation beneficial or detrimental to defense readiness? Is a case by case analysis required for each situation to properly answer this question?

D. METHODOLOGY

The data and information used in this thesis were obtained from a variety of sources. Historical and background information was found through extensive use of the Naval Postgraduate School Dudley Knox Library holdings and electronic resources department. Data necessary for the case study were obtained through coordination with and site visits to the Joint Operations Staff at Commander, Electronic Combat Wing Pacific Fleet (COMVAQWINGPAC)

headquarters, Naval Air Station Whidbey Island, Washington and the Comptroller and EA-6B Readiness Staffs at Commander, Naval Air Forces U.S. Pacific Fleet (COMNAVAIRPAC) headquarters, Naval Air Station North Island, California. Personal interviews were also conducted at both locations to supplement and understand data and information collected at these sites.

E. ORGANIZATION

This thesis is divided into six chapters. Chapter I provides introductory information and the purpose for this study. In addition, the chapter provides the research questions, objectives and scope of the study and the methodology employed in performing the research for the thesis.

Chapter II provides an in-depth analysis and history of interservice rivalry and the current roles and missions debate. Key statutory elements and Defense Department policies and reports familiarize the reader with the factors creating the current “jointness” and mission consolidation environment in the Department of Defense.

Chapter III is an extensive assessment of jointness and combined military operations prior to enactment of the Goldwater-Nichols Defense Reorganization Act of 1986. Secondly, the current trend towards mission consolidation as a means of alleviating the pressures of budget austerity is examined.

Chapter IV presents the case study for the thesis. An analysis of the processes, plans and options for establishment of the EA-6B Joint-Service

Expeditionary Squadrons is provided. The timeframe for the case study is early fiscal year 1995 to the present.

Chapter V addresses issues of logistics, funding and readiness and how they have been affected by consolidation of the airborne tactical electronic warfare mission. Site survey data, budget reports and government publications provide the background for the analysis.

Chapter VI presents summary remarks and conclusions that address the research questions. Each chapter also ends with summary and concluding remarks. Additionally, a listing of areas for further research is provided.

II. INTERSERVICE RIVALRY AND THE ROLES & MISSIONS DEBATE

So that in the nature of man, we find three principal causes of quarrel. First, competition; second, diffidence; thirdly, glory.

- Thomas Hobbes (*Leviathan*, 1651)

Tension within an organization is good—as long as its emotional content is low. When you are in an organization without tension, it is like watching a drunk—the muscles are flaccid, the coordination poor, and the “bundle of relations” is in danger of falling on its face.

- Harlan Cleveland

The recent serious debate within the Department of Defense and Congress over the roles and missions of the various armed services in the post-Cold War era can be traced back to the beginnings of the Cold War in the late 1940s. Not surprisingly, the issues and disagreements closely mirror the disputes of nearly fifty years ago, and akin to the unprecedented negotiations over assignment of military roles in the 1960s for the new arena of warfare created by the development of the atomic bomb. The United States armed forces are experiencing the largest drawdown since the end of World War II. Budget cuts facing the services are on a scale similar to those experienced in the late 1940s and early 1950s. Today's military is faced with new and dramatically evolving warfare environments such as electronic warfare, space, cyberspace-information warfare, and peacekeeping operations/enforcement.¹ Even the debate over how to redefine current roles and missions is the same as

¹ Kuehl, Daniel T. and Miller, Charles E., “Roles, Missions, and Functions; Terms of Debate,” *Joint Force Quarterly*, No.5, Summer, 1994, p. 105.

half a century ago, focusing on eliminating redundancy and duplication between services in terms of missions, equipment and infrastructure. In his now famous address to the Senate in July 1992, Senator Sam Nunn (D-GA), then Chairman of the Senate Armed Services Committee, called for a reevaluation of service roles and missions to eliminate redundancy and duplication among the armed forces.² This is precisely what the National Security Act (1947) and Key West Agreement (1948) intended to do.

This chapter will focus on the debate over roles and missions and the interservice rivalries associated with this debate. The chapter is divided into five sections, beginning with a history of the interservice disputes over roles and missions from the 1920s to the 1980s. Section B addresses the 1986 Goldwater-Nichols Act and its tremendous influence on the armed forces of the 1990s. Section C covers the first two roles and missions studies performed by Chairmen of the Joint Chiefs of Staff, Admiral William J. Crowe, Jr. and General Colin L. Powell. Section D examines the report of the congressionally mandated Commission on Roles and Missions issued in May, 1995. The final section will present summary and concluding remarks.

A. BACKGROUND AND HISTORY

Interservice rivalry is as old as the nation itself. However, prior to the introduction of aircraft as warfighting assets, disputes between the services

² Nunn, Sam, "The Defense Department Must Thoroughly Overhaul the Services' Roles and Missions," *Congressional Record*, 138:S9559-S9565, July 2, 1992, p. S9560.

were relatively minor and usually occurred and were resolved in the field.³ The reason for the comparatively superficial impact of these disputes rests in the two-dimensional nature of warfare at the time. The Army was responsible for conducting operations on land, while the Navy and Marine Corps were responsible for the sea and amphibious operations. With the introduction of the airplane into military operations, the lines dividing roles and missions became increasingly blurred. Disagreements over the use of aircraft between the Navy and Army became so heated that several agreements were drafted between the War and Navy departments that allowed both services to develop aviation assets to meet their respective warfighting needs.⁴ The last of these agreements, the *Joint Action of the Army and Navy (JAAN)*, lasted through the end of World War II, but several significant events including the establishment of the Army Air Forces in 1942, the introduction of atomic warfare, the new world order known as the Cold War, and the enormous defense drawdown after the war, called for major changes to the organization of the U.S. military.

1. National Security Act (1947)

The National Security Act of 1947 was a partial solution to the problem. The 1945 bombings of Hiroshima and Nagasaki by the Army Air Force ended World War II as well as established credibility to the concept of strategic

³ Winnacker, R. A., "The Historical Framework," in *Report to the President and the Secretary of Defense by the Blue Ribbon Defense Panel, Appendix A: Mechanisms for Change-Organizational History*, July, 1970, p. 4.

⁴ Rearden, Steven L., *The Formative Years 1947-1950, History of the Office of the Secretary of Defense (Vol. I)*, Washington D.C., Historical Office, Office of the Secretary of Defense, 1984, p.386-387.

bombing and for the Army Air Force argument that they should be a separate service. The global nature of the war had also convinced many of the civilian leaders of the military and members of Congress that America's armed forces should be unified under one department. The Army favored the idea, suggesting a "general staff" to coordinate the services. This is a reflection of the Army's historical dependence on the other services for transportation and air support. The Navy opposed the concept and favored decentralization much like the *status quo*. The Army Air Force loosely supported its parent service in return for support of its independence as a separate force.⁵ During unification hearings after World War II, General Dwight D. Eisenhower, then Army Chief of Staff, argued that the war had identified the "...crucial importance of unified commands and unified theater actions, the mutual dependence of the services. The idea of separate ground, sea, and air operations... 'was gone forever.'"⁶

The signing of the National Security Act on September 18, 1947 was a compromise of the highest order. The Act officially separated the Air Force from the Army and established it as the third department of a new centralized Department of Defense. The department was organized under a civilian secretary supported by the Joint Chiefs of Staff who were finally given legal status by the Act. Congress was careful not to give too much power to the Executive by combining the services into a single department, resulting in the

⁵ McNaugher, Thomas L. and Sperry, Roger L., *Improving Military Coordination: The Goldwater-Nichols Reorganization of the Department of Defense*, Washington D.C., The Brookings Institution, 1994, p.220-221.

⁶ Wolk, Herman S., "Revolt of the Admirals," *Air Force Magazine*, 71:5, May, 1988, p. 63.

“weak confederation of military units” that constituted the Department of Defense.⁷ Navy Secretary James Forrestal was named the first Secretary of Defense. In conjunction with the signing of the National Security Act, President Truman also issued Executive Order 9877 that outlined service roles and missions for budgetary and administrative purposes.⁸ The two documents were at times at odds with each other causing confusion and disagreement over who had responsibility for what with respect to mission and, as importantly, budget authority. For example, a major rift between the Air Force and Navy occurred over the Navy’s supercarrier concept. Coupled with statements by retiring Chief of Naval Operations, Fleet Admiral Nimitz, referring to the Navy’s carrier air force as the primary bombing service, and cuts to the Air Force budget by the Bureau of the Budget to meet shipbuilding requirements, the Air Force began to suspect that the Navy was attempting to build a competing strategic air force in direct violation of Executive Order 9877.⁹ Initially, Secretary Forrestal tried to allow the individual services work out their disagreements on their own, but when it became clear that the lines of contention were too much for the service chiefs to overcome, he summoned them to a conference at Naval Air Station Key West to iron out the roles and missions debate.

⁷ Hobkirk, Michael D., The Politics of Defence Budgeting, Washington D.C., National Defense University Press, 1983, p. 26.

⁸ Rearden, p. 392.

⁹ Ibid., p. 393.

2. Key West Agreement (1948)

From March 11-14, 1948, the military heads of each of the services, along with Secretary Forrestal, hammered out an agreement that attempted to address the continued problems surrounding the roles, missions and functions of each branch.¹⁰ The document, entitled *Functions of the Armed Forces and the Joint Chiefs of Staff*, proved to be another compromise between the various services:

The Navy gained many of its goals: retention of the Navy-based Marine Corps; the authority to provide close air support for Marine land operations; and the authority to carry out those air operations, including ground-launched missions, which are required for sea battles...And the Army and Air Force agreed to cooperate with each other as a team on joint missions...the Air Force pledged to provide the Army with airlift and close air support.¹¹

Many feel that the real issue of contention between the Air Force and the Navy during this period was completely centered on responsibility for the strategic atomic mission which was the key to budget dollars in the early days of the Cold War.¹²

One of the more significant outcomes of the Key West Agreement was the definition of secondary or "collateral" roles and missions that required each

¹⁰ For purposes of consistency, the following generally accepted definitions are provided: Roles are broad, enduring purposes specified by Congress in law for the Services and selected DoD components, Missions are the tasks assigned by the President or Secretary of Defense to the combatant commanders, and Functions are specific responsibilities assigned by the President and Secretary of Defense to enable the Services to fulfill their legally established roles.

¹¹ Halperin, Mortin H. and Halperin, David, "The Key West Key," *Foreign Policy*, No.53, Winter, 1983-84, p. 117.

¹² Wolk, p. 64.

service to assist other services in the accomplishment of their primary missions. Unfortunately, this actually caused an increase in interservice disputes. Halperin and Halperin (1983) point out that even though the agreement outlined the basic structure of roles and missions, each service fiercely protected their primary duties to the detriment of the secondary duties that required the use of budget dollars to support a rival service. Specifically, the Air Force neglected close air support while the Navy slighted sea lift in order to concentrate on sea control and nuclear warfare.¹³ Regardless of its shortcomings, Forrestal presented the Key West Agreement to President Truman on April 27, 1948. The President consequently canceled Executive Order 9877 in favor of the accord. In doing so, Key West set the stage for continued interservice rivalry for decades to come.

3. The Revolt of the Admirals (1949)

One of the most famous interservice disputes occurred the following year during the so-called "Revolt of the Admirals," when newly appointed Secretary of Defense Louis Johnson canceled the Navy's planned flush-deck supercarrier, the USS UNITED STATES, believing that naval airpower was a collateral role and that the funds would be better utilized on building up the Air Force's strategic bomber inventory; specifically, the B-36. This move resulted in the immediate resignation of Secretary of the Navy John L. Sullivan and the beginning of a bitter battle between the top officers of both the Air Force and Navy. Captain Arleigh Burke, head of the Navy's Op-23 a research and policy unit, spearheaded a public campaign to press for the reinstatement of the

¹³ Ibid., p. 117-118.

supercarrier program while simultaneously gathering information critical of the B-36 program. This information raised questions not only about the technical aspects of the bomber, but about alleged occurrences of contract fraud and conflict of interests.¹⁴ After an “anonymous document” circulated charging Defense Secretary Johnson among others of fraudulent activity in connection with the B-36, Congressional hearings were held to investigate.

What began as an attempt by the Navy to protect naval air and glean a portion of the strategic weapons budget quickly became a bitter clash between the Navy and her sister services. Secretary of the Air Force W. Stuart Symington and Air Force Chief of Staff General Hoyt Vandenburg testified that “The B-36 intercontinental bomber...was under attack by naval officials because it was seen as a threat to the Navy. These attacks had always increased when the military budget was under consideration.”¹⁵ Chairman of the Joint Chiefs General Omar Bradley dealt a crushing blow to the Navy’s case by characterizing the manner in which the Navy hierarchy had approached the loss of the supercarrier and other budgetary cuts as “open rebellion against civilian control.” He further desecrated the Navy as “‘fancy dans’ who won’t hit the line with all they have on every play, unless they can call the signals.”¹⁶ After hearing this and related testimony, Chairman of the House Armed Services Committee, Carl Vinson, stated that there was “...not one iota,

¹⁴ Rearden, p. 412-413.

¹⁵ Wolk, p.67.

¹⁶ Rearden, p. 419.

not one scintilla of evidence that would support charges that collusion, fraud, corruption, influence, or favoritism played any part whatsoever in the procurement of the B-36 bomber.”¹⁷ He further congratulated Secretary Johnson saying, “You did the right thing in canceling the carrier and if I had occupied that position, I would have done the same thing.”¹⁸ After all the smoke had cleared, Johnson forbade the services from reprisals against any officer who had testified. However, this restriction did not apply to Chief of Naval Operations, Admiral Louis E. Denfeld, whom Johnson relieved based on Denfeld’s testimony which left questions to his loyalty and respect for civilian authority.¹⁹

Wolk (1988) states, “Overtly, the 1949 ‘rebellion’ pitted the flush-deck supercarrier against the B-36 bomber, but the real struggle was about roles and missions.” Why was this controversy so pivotal to the roles and missions debate? Rearden (1984) points out:

Apart from laying to rest accusations of corruption in B-36 procurement, the most valuable contribution of the hearing may well have been in providing an outlet for pent-up frustrations which, without some means of release, might have led to even more serious problems.²⁰

Even though the controversy and subsequent hearings failed to give the Navy significant control over the strategic mission, it did give the Navy some nuclear

¹⁷ Wolk, p. 66.

¹⁸ Rearden, p. 420.

¹⁹ Ibid.

²⁰ Ibid., p. 422.

capability thus preventing a monopoly for the Air Force. The Air Force was subsequently forced to improve its strategic bomber capability in penetrating Soviet airspace and survivability.²¹

4. Defense Reorganization Acts (1953 & 1958)

Defense reorganization in 1953 gave increased powers to the Secretary of Defense and the Joint Chiefs. However, increasing interservice bickering over the development and control of strategic arms prompted Congress to implement further changes within the Department of Defense.²² The 1958 Defense Reorganization Act designated the commanders of the unified and specified commands as “Combatant Commanders” or Commanders in Chief (CINCs) of their respective areas of responsibility (AOR). The law also placed the CINCs in direct chain of command of the President, Secretary of Defense, and the Joint Chiefs. This effectively placed control over the broad missions in the hands of the CINCs and redefined the services as force providers for the individual joint commanders.²³ One final, but extremely important, aspect of the 1958 Reorganization Act gave the Secretary of Defense the legal authority to exert centralized control over the individual services via the budgetary processes. Specifically, the Act gave the Secretary the power to effect “...the

²¹ Thompson, Fred and Jones L.R., Reinventing the Pentagon, San Francisco, Jossey-Bass Publishers, 1994, p. 30.

²² Hobkirk, p. 29.

²³ Kuehl, p. 103.

transfer, reassignment, abolition, and consolidation of functions” of the armed forces to advance economic and efficient operations within the Department of Defense.²⁴

B. THE GOLDWATER-NICHOLS DEFENSE REORGANIZATION ACT (1986)

The Defense Reorganization Act of 1958 was the last major reform of the Department of Defense for 27 years.²⁵ The 1961-67 tenure of Defense Secretary Robert McNamara was characterized by his employment of civilian staff instead of the Joint Chiefs to control and subdue the interservice rivalries rampant in weapons acquisition. This power was granted him by the 1958 Act. Military department and service resistance to McNamara and his systems analysis “whiz kids” led later administrations to tend to leave significant management discretion to the service secretaries and chiefs. The result was that when President Ronald Reagan took office in 1981, he was faced with nearly twenty years of festering service rivalries.²⁶

By 1986, a litany of U.S. military failures including operations in Vietnam, the failed hostage rescue attempt in Iran, sea-based MX missile systems, the bombing of Marine barracks in Lebanon, and service incompatibilities during the 1983 invasion of Grenada, led Congress to once

²⁴ Hall, Michael A., Defense Policymaking: the Post-Cold War Roles and Missions Debate, Monterey, CA, Naval Postgraduate School, 1993, p. 19.

²⁵ McNaugher, p. 224.

²⁶ Ibid.

again consider reorganizing the Department of Defense.²⁷ In 1986, Senator Barry Goldwater (R-AZ) and Congressman William Nichols (D-AL) sponsored a reorganization bill that passed both the House and Senate by overwhelming majorities. President Reagan signed the bill into law on October 1, 1986. "By passing into law some of the proposals that had initially been put forth under the Eisenhower administration, the Goldwater-Nichols Act corrected some of the more pathological administrative shortcomings of the defense department."²⁸ The bill provided for a considerable increase in the power of the Chairman of the Joint Chiefs of Staff by making him the principal military advisor to the President (subject to the prerogatives of the Secretary of Defense) and primary spokesman for the combatant commands within the Defense Department. However, the bill did require that the Chairman submit any dissenting comments from the service secretaries and chiefs along with his own. Additionally, the bill provided for the creation of a Vice-Chairman second (instead of sixth) in rank behind the Chairman. The CINCs were also given expanded and better defined powers over their subordinate commands in all areas of military operations, training and logistics.²⁹ The Goldwater-Nichols Act reemphasized the need for unity of combat command. The successes of military operations since 1986 including Operations El Dorado Canyon (Libya, 1986), Just Cause (Panama, 1989), Sharp Edge (Liberia, 1990) and of course,

²⁷ Halperin, p.114-115 and McNaugher, p. 226-229.

²⁸ Thompson and Jones, p. 78.

²⁹ McNaugher, p. 245.

Desert Shield and Desert Storm (Iraq, 1990-91) provide some positive evidence to support the effectiveness of the Act.

What the Goldwater-Nichols Act did not specifically address (as is the case with every reorganization act since 1947) was the roles and missions of the services. The Act did require the Chairman of the Joint Chiefs to provide a triennial report to "...recommend such changes in the assignment of functions (or roles and missions) as the Chairman considers necessary to achieve maximum effectiveness of the Armed Forces."³⁰ The rest of this chapter is dedicated to the three major reports on the roles and missions of the armed forces issued since enactment of the Goldwater-Nichols Act.

C. CHAIRMAN OF THE JOINT CHIEFS OF STAFF REPORTS ON THE ROLES AND MISSIONS OF THE ARMED FORCES

As mentioned, one provision of the Goldwater-Nichols Act was to require the Chairman of the Joint Chiefs of Staff to report at least once every three years on recommendations for modifying the roles and missions of the Armed Forces to improve efficiency and economy in operations. There have been two such reports. The first was made by Admiral William Crowe in September, 1989 and the second was made by General Colin Powell in February, 1993. This section will provide brief overviews of the recommendations of each report and responses to them.

³⁰ Powell, Colin L., Chairman of the Joint Chiefs of Staff Report on the Roles, Missions, and Functions of the Armed Forces of the United States, Washington D.C., Office of the Chairman of the Joint Chiefs of Staff, February 10, 1993, p. v.

1. Admiral William J. Crowe, Jr. - "Roles and Functions of the Armed Forces"

Admiral Crowe was the first to submit the required report to Congress on September 28, 1989, only two days before his retirement. The report presented only two major findings: (a) "The 'roles' of the Armed Forces as crafted in law are fundamentally sound." and (b) "The 'functions' of the Armed Forces as written in DODD 5100.1 ³¹ are also basically sound, but need to be revised and updated to more clearly reflect current national military strategy, our efforts to harness technology, and our responses to evolving threats to the national security."³² Of the four recommended changes to DODD 5100.1, only two were considered substantive: (1) assignment of close air support as a function of all the services, and (2) assignment of primary responsibility for space functions to the Air Force.³³ Defense Secretary Dick Cheney never publicly criticized the report, but neither did he implement any of the recommendations.

Response to the report was tepid. No major overhaul in roles and missions was recommended. However, in September 1989, the Cold War still dominated defense planning. The way in which the Defense Department delineated roles, missions and functions in 1948 still applied to the present

³¹ DODD 5100.1 is the document that promulgates the responsibilities and functions of the Defense Department.

³² Crowe, William J, Jr., Roles and Functions of the Armed Forces: A Report to the Secretary of Defense, Washington D.C., Office of the Chairman of the Joint Chiefs of Staff, September 28, 1989, p. 28.

³³ Collins, John M., Military Roles and Missions: A Framework for Review, Washington D.C., Congressional Research Service, May 1, 1995, p. 15.

situation. The events that took place in the ensuing two and a half years would attempt to change that mentality.

2. General Colin L. Powell - "Chairman of the Joint Chiefs of Staff Report on the Roles, Missions, and Functions of the Armed Forces of the United States"

By July, 1992, significant changes in the world order prompted Senator Sam Nunn's landmark speech "The Defense Department Must Thoroughly Overhaul the Services' Roles and Missions." He lauded the Goldwater-Nichols Act as "...the most far-reaching step yet taken to create a coherent, efficient, and effective Defense Establishment," and contended that the law was one of the keystones for the overwhelming success of Operation Desert Storm.³⁴ Senator Nunn was quick to point out, however, that the Act had only addressed roles and missions in a superficial manner, namely the requirement of review of the functions of the military by the Chairman of the Joint Chiefs of Staff. He also argued that the Key West Agreement of 1948 had fatal flaws. Although the agreement addressed the roles and missions of each service, it also allowed for the "...tremendous redundancy and duplication among the military services."³⁵ He highlighted ten broad areas of "substantial duplication and potential opportunity for streamlining" and challenged Chairman of the Joint Chiefs of Staff, General Powell, "...to conduct a no-holds-barred, everything-on-the-table review of the current assignments of roles and

³⁴ Nunn, p. S9559.

³⁵ Ibid., p. S9560.

missions among the military services.”³⁶ Senator Nunn’s statements and recommendations left little doubt in anyone’s mind of what he and his Senate Armed Services Committee expected to see in General Powell’s report: significant recommendations for change and elimination of what appeared to be overlapping and duplicative programs and systems.

General Powell presented his report to Secretary of Defense Les Aspin and Congress on February 10, 1993. The report was not what Senator Nunn and others in Congress had expected. Instead of recommending sweeping changes to the alleged redundancy and overlapping capabilities of the Armed Forces, General Powell addressed 29 separate issues with his recommendations for their futures. Of key importance was General Powell’s defense of necessary “redundancies” within the services and staunch support for the redundancies created by the Key West Agreement:

Some argue that the Key West Agreement is flawed, that it failed to resolve redundancy and duplication. In fact, what the Chiefs recognized in 1947, and Congress has supported ever since, is that there are a number of advantages in having similar, complementary capabilities among the Services. the availability of similar but specialized capabilities allows the combatant commander to tailor a military response to any contingency, regardless of geographic location.³⁷

Recommendations in support of redundancy numbered eleven while only three supported streamlining. General Powell recommended consolidation of basic fixed-wing flight training and combining the strategic command and control air forces under the newer Navy E-6A. He also recommended reduction of Air

³⁶ *Ibid.*, p. S9561.

³⁷ Powell, p. I-6.

National Guard wings for U.S. air defense. Among those areas identified by Senator Nunn as redundant and duplicative, General Powell supported overlap as necessary for effective accomplishment of missions. Key to his recommendations was his rebuttal of Senator Nunn's assertion that America effectively maintained four air forces. General Powell stated that the United States Air Force is America's only air force and that the other services air warfare components were "essential to their warfighting roles."³⁸ Under the umbrella of that ideology, General Powell made several controversial recommendations regarding air assets: (1) zero reductions to Marine Corps tactical air wings, (2) retention of attack helicopters in both the Army and Marine Corps, (3) retention of C-130 assets in each service, (4) retention of both the Navy's EP-3 and Air Force's RC-135 electronic surveillance aircraft, and (5) continued support and funding for both the Air Force EF-111 and Navy EA-6B electronic attack aircraft.

Criticism of General Powell's report came quickly and directly. Most notably, then Chairman of House Armed Services Committee, Ronald V. Dellums (D-CA) remarked during hearings on the report:

I will be candid in saying that I had hoped that this report would represent a more in-depth review and would recommend more substantial changes than it indeed does...Our budget decisions will be harder this year, in the chair's opinion, because of this inefficiency.³⁹

³⁸ *Ibid.*, p. xxiii.

³⁹ U.S. Congress, House, *Roles, Missions and Functions of the Armed Forces of the United States*, Hearing Before the Committee on Armed Services, (HASC No. 103-17), 103d Congress, 1st Session, Washington D.C., U.S. GPO, February 24, 1993, p. 4.

The U.S. General Accounting Office (GAO) commented that the Powell report exceeded the Crowe report in substance, but that it failed to address several key areas outlined in a report to Senator John W. Warner (R-Va) released in July 1993.⁴⁰ Many others communicated similar disappointment over the report.⁴¹ With heavy criticism of the results and recommendations of General Powell's report, Congress made good on Senator Nunn's "promise" that if the military couldn't reform itself, then Congress would assist them.

D. THE COMMISSION ON ROLES AND MISSIONS OF THE ARMED FORCES

Although possessed of some autonomy, the JCS still represents a structure for achieving consensus among the services rather than dynamic leadership. It thus surprised few people that the periodic roles and missions reviews were largely content to tinker around the margins of the subject.⁴²

The above statement supports the decision by the House and Senate Armed Services Committees, to take matters into their own hands. A conference report accompanying the Defense Authorization Act for Fiscal Year

⁴⁰ U.S. General Accounting Office, *Roles and Functions: Assessment of the Chairman of the Joint Chiefs of Staff Report*, GAO/NSIAD-93-200, Washington D.C., July, 1993, pp. 2-6.

⁴¹ Collins, p. 17.

⁴² "JCS Champions Status Quo," *International Defense Review*, May 1, 1995, p. 34.

1994, established an independent Commission on Roles and Missions of the Armed Forces.⁴³ As part of their findings, the conferees concluded:

The existing process of a triennial review of roles and missions by the Chairman of the Joint Chiefs of Staff pursuant to provisions of law enacted by the Goldwater-Nichols Department of Defense Reorganization Act of 1986 has not produced the comprehensive review envisioned by Congress...It is difficult for any organization, and may be particularly difficult for the Department of Defense, to reform itself without the benefit and authority provided by external perspectives and analysis.⁴⁴

Dr. John P. White, director of Harvard University's Center for Business and Government, was appointed as Chairman of the eleven member panel. Panel members were selected from the private sector and included several retired flag and general officers. The mandate of the commission was to:

- Review the appropriateness of existing service role, mission and function allocations in light of the post-Cold War era environment;
- Evaluate and report on alternative distribution of those allocations; and
- Recommend changes to the existing definitions and allocations of those roles, missions, and functions.⁴⁵

The overarching goal of the Commission on Roles and Missions was to pursue Senator Nunn's theory that unnecessary redundancy and duplication was rampant among the services, and to recommend solutions for eliminating overlap to streamline and improve the efficiency of the U.S. military.

⁴³ U.S. Congress, House, *National Defense Authorization Act for Fiscal Year 1994*, Conference Report to Accompany H.R. 2401 (Report 103-357), 103d Congress, 1st Session, Washington D.C., U.S. GPO, November 10, 1993, p. 197-202.

⁴⁴ Ibid.

⁴⁵ Ibid.

With a full year and virtually *carte blanche* to investigate roles and missions, expectations were high as the Commission met for the first time in May, 1994. Early on, Chairman White indicated that, "the biggest challenge [for the commission] is to find out what we are going to emphasize and not emphasize as we go forward."⁴⁶ By October, 1994, the Commission had identified 25 specific topics to be addressed under three broad categories: Joint Warfighting/New Missions, Major Contingencies, and Central Support/Infrastructure.⁴⁷

Each service was invited to submit recommendations and comments on the most immediate issues pertaining to roles and missions. This sparked a round of interservice disputes comparable to those of the post-World War II era. Perceiving the Commission as a threat to individual service programs, each service established a Pentagon office headed by a flag officer to address component roles and missions. The lines of battle were drawn quickly. General Merrill A. McPeak, the controversial Air Force Chief of Staff, fired the first shot.

⁴⁶ *Commission on Roles and Missions of the Armed Forces Holds Initial Meeting*, CORM release, June 2, 1994, p. 1.

⁴⁷ Collins, p. 23.

While the other services concentrated on justifying to the commission what they do, the Air Force made what some are calling a naked grab to take duties from other branches. The Air Force also offered to give up at least one mission it has performed since its creation, something none of the other services has been willing to do.⁴⁸

Among the Air Force recommendations were USAF control of all space operations, theater missile defense and deep strike capabilities, partitioning of the battlefield, elimination of Marine Corps fixed-wing aircraft, major reductions to tactical air assets of all other services, and the transfer of responsibility for close air support to the Army. General McPeak attempted to brief his reasoning behind these recommendations, but was "cut short" by emotionally charged accusations by other service chiefs.⁴⁹ Navy and Army recommendations approached the matter with less aggression. The Navy/Marine Corps report discussed traditional roles and missions and recommended nine issues for consideration including primary use of Naval and Marine assets for forward presence, executive authority over theater missile defense and strategic sealift, and retention of space and information systems in the joint arena. The Army stressed six issues: strategic mobility, maintenance of a strong overseas presence, primary control of theater air defense, non-partitioning of the battlefield, and joint operations in space.⁵⁰

⁴⁸ Kreisher, Otto, "Interservice Rivalry Takes a Nasty Turn: Debate on Branches' New Roles Heating Up," *San Diego Union-Tribune*, February 11, 1995. p. A-21

⁴⁹ Glashow, Jason and Holzer, Robert, "USAF Aggressively Guns for Roles," *Defense News*, 9:36, September 12-18, 1994, p. 1.

⁵⁰ Ibid.

Collins (1995) observed, "All generally agreed that some adjustments seemed advisable, but each predictably emphasized solutions that would improve its position, resources, and capabilities. Reluctance to compromise was evident."⁵¹ Even though Chairman White assured the services that the basic structure and existence of the services would not be threatened, uneasiness and interservice bickering continued in the months leading up to the presentation of the Commission findings. Ness (1995) observed, "Because the commission presumably has the ear of Congress, the services scrambled to make their best case."⁵²

When the Commission on Roles and Missions finally submitted its report "Directions for Defense: Report of the Commission on Roles and Missions of the Armed Forces" to the Secretary of Defense and Congress on May 25, 1995, it was met with mixed reactions. The Report did not take the form expected by most. In fact, it differed entirely from original expectations, and some argued it differed from its statutory mandate.⁵³

Senator Nunn had expressed hopes the previous year that the Commission would excel where the previous roles and missions reviews by Admiral Crowe and General Powell had fallen short. His visions were not realized as one of the primary findings of the Commission stated:

⁵¹ Collins, p. 5.

⁵² Ness, Leland, "Turf Warfare Scrutinized," International Defense Review, 28:5, May 1, 1995, p. 32.

⁵³ "Think Tank Blasts CORM Report," *Armed Forces Newswire Service*, September 12, 1995.

A conventional criticism of the Services—unrestrained parochialism and duplication of programs—is overstated...In each case, our analysis of core competencies, assignment of functions, and the needs of the unified CINCs found that popular perceptions of large-scale duplication among the services are wrong.⁵⁴

What the Commission did find in their 124 page report was that the real question was how well the services were combining their efforts to support the CINCs to ensure the success of joint operations.⁵⁵ The Commission's recommendations were classified under three broad areas: Effective Unified Military Operations, Efficient and Responsive Support, and Improved Management and Direction. The commission identified six attributes of a successful Defense Department for the future:

- *Responsiveness* to rapidly changing global requirements;
- *Reliability* in delivery of predictable, consistent performance;
- *Cooperation and Trust* necessary for successful unified operations;
- *Innovation* in new weapons, organization, and strategy;
- *Competition* in constructive solutions to the complex problems of the future; and
- *Efficiency* in the use and allocation of resources.

Recommendations on how the future force could accomplish the goals were numerous. Of note were recommendations on providing a joint vision for the

⁵⁴ U.S. Commission on Roles and Missions of the Armed Forces, Directions for Defense: Report of the Commission on Roles and Missions of the Armed Forces, John P. White, Chairman, Arlington, VA, May 25, 1995, p. 1-4.

⁵⁵ Pine, Art, "Panel Urges U.S. Armed Forces Teamwork," *Los Angeles Times*, May 25, 1995, p. 22.

department as a whole, integrating the service doctrines of "Global Reach, Global Power" for the Air Force, "Force XXI" for the Army and "Forward...From the Sea" for the Navy; further empowerment of the Joint Chiefs and the CINCs in determining force and procurement requirements; improvement of joint training; defining service 'core competencies'; outsourcing of depot maintenance, education and training; consolidation of service staffs; and reengineering of the planning, programming and budgeting system.

Both praise and criticism of the Commission report came quickly. Many viewed that the report did right by going beyond the debate over allocation of roles and missions to the various services and looking at the problems that plagued the defense systems as a whole.⁵⁶ Defense Acquisition Executive Paul Kaminski praised the Commission's call to maximize privatization and collocation of aviation program management offices.⁵⁷ Others praised the Commission's willingness to go against the congressional tide, for example, the Commission's recommendation to upgrade the Navy and Marine Corps' EA-6B *Prowler* to meet the electronic attack needs of the DoD while retiring the Air Force's equivalent, the EF-111 *Raven*.⁵⁸

Criticism of the report was trenchant and widespread. Many accused the Commission of skirting the issue of interservice rivalry that had created a

⁵⁶ Shanahan, David, "Roles Report Finds Its Mark: Commission Focuses on Broad Process Issues," *Defense News*, 10:32, June 19-25, 1995.

⁵⁷ Morrocco, John D., "Merging Aviation Support Piques Pentagon Interest," *Aviation Week & Space Technology*, 142:23, June 5, 1995, p. 43.

⁵⁸ "Roles and Missions Gives EA-6B Nod for Airborne Electronic Warfare," *Defense Daily*, 187:40, May 26, 1995, p. 295.

state of "gridlock" at the Pentagon.⁵⁹ Robert W. Gaskin, a former Pentagon planner, observed, "The sad result is that the commission was simply unable to transcend interservice rivalries...Fundamental reforms have been camouflaged by a fine mist of proposals that fail to address the structural imbalances plaguing the American military."⁶⁰ An independent think tank, The Defense Budget Project, characterized the report as a "disappointment," citing glaring failures to conform to its charter and contradictory statements about the deep strike mission.⁶¹

Further controversy came when Defense Secretary William J. Perry presented his response to the Commission's recommendations. Dr. White, now Deputy Secretary of Defense (he was confirmed by Congress only two weeks after release of the report), reported in a lengthy press conference that Secretary Perry had accepted approximately two-thirds of the Commission's 100 plus recommendations. "Acceptance," however, fell into two categories; first, that the recommendation had been or was in the process of being implemented and second, that the recommendation warranted further study. Only a relatively few number of eight to ten recommendations were flatly rejected.⁶² Most notable of the recommendations cited for immediate

⁵⁹ Pexton, Patrick, "The Conclusion: Not Much to Fix," *Air Force Times*, 55:4, June 5, 1995, p. 8.

⁶⁰ Pine.

⁶¹ Armed Forces Newswire Service.

⁶² White, John P., "DoD Responds to Roles and Mission Commission Report Findings," *Defense Issues*, 10:82, August 25, 1995, p. 1.

implementation was the assignment of the Air Force as executive agent for space operations. However, the Secretary of Defense deferred making a definitive response on the more controversial areas of deep strike responsibilities and co-location of Navy and Air Force aviation support facilities. The Secretary rejected Commission proposals such the training of constabulary forces and placing the Vice-President in charge of counter-proliferation operations.⁶³ Many supporters of the report praised the Pentagon's implementation of the bulk of the recommendations, but others accused Secretary Perry of avoiding the tough choices. Others pointed out that many of the recommendations accepted by the Defense Department were simply reinforcements of ongoing reforms and projects. One commentator stated, "Mr. Perry's decision to conduct what will amount to mini-roles reviews is disappointing at a time when decisive leadership is needed."⁶⁴

E. SUMMARY AND CONCLUDING REMARKS

This chapter provided background on the issue of interservice rivalry and the roles and missions debate from the post-World War II era of unification and the onset of the Cold War to the present. The National Security Act of 1947 unified the services under the Department of Defense, established statutory authority for the Joint Chiefs of Staff, and created the United States

⁶³ Robinson, John, "Pentagon to Carry Out Most of Commission's Proposals," *Defense Daily*, 188:39, August 28, 1995, p. 288.

⁶⁴ "End the Roles Debate," *Defense News*, 10:35, September 4-10, 1995, p. 22.

Air Force as a separate service. However, the Unification Act was unclear on the assignment of roles and missions to each of the services. The Key West Agreement of 1948 delineated the roles and missions for each of the services and has proven to be the primary source of interservice role and mission definition and rivalry that exists today. One of the most legendary instances of these oftentimes acrimonious disputes between the services was the so-called "Revolt of the Admirals" which grew from service competition over the budget-rich strategic bombing mission. In essence, the revolt aired the growing antagonism between the services over roles and missions. Reorganizations of the Defense Department in 1953 and more significantly in 1958 provided increased power and authority to the Secretary of Defense and the Joint Chiefs of Staff over resource decision making in an effort to bridge growing rifts between the services. Defense Secretary Robert McNamara's extensive use of this newly apportioned power during his 1961-1967 tenure contributed to the interservice rivalry that characterized the relationship between the Armed Forces into the 1980s.

The Goldwater-Nichols Defense Reorganization Act of 1986 is viewed as a largely successful measure that further strengthened the Office of the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, while pushing for increased interservice cooperation. As with reorganization efforts in the past, the Goldwater-Nichols act largely avoided specifically defining roles and missions for the services. The act did, however, require triennial review and recommendation by the Chairman of the Joint Chiefs on improvements to and modifications of the roles and missions assigned to the various services. Only

two reports were submitted to the Secretary of Defense and both were treated by Congress as inadequate. Many lawmakers on Capitol Hill, especially Senator Sam Nunn, felt that elimination of excessive redundancy and duplication within the services held the key to vast cost savings. An independent Commission on Roles and Missions of the Armed Forces was mandated in the Defense Authorization Act for Fiscal Year 1994 in response to the two "ineffective" documents produced by the Joint Chiefs. The Commission was given a year and free rein to analyze the current allocation of roles and missions and provide recommendations on how to streamline the services and eliminate duplication and inefficiencies. The final report of the Commission, however, dismissed these concerns as "non-issues" and recommended improved joint operability, privatization and reengineering of support systems, and improved management of the budget process and civilian personnel.

Today's Armed Forces are facing situations that closely mirror those faced 50 years ago. The world order, once rocked by the onset of the Cold War is now facing the dynamic changes associated with its demise. The Defense Department is experiencing budget cuts on a scale comparable with cuts made following World War II. As in 1947 with the National Security Act, the Goldwater-Nichols Act and has affected the roots of the defense infrastructure. Additionally, in the late 1940s the military was confronted with unfamiliar warfighting arenas such as nuclear warfare and conflict polarized between the superpowers. Today, the arena the military has trained for fifty years to fight also has changed. Realms that future warfare will inhabit include space,

electronic warfare, cyberspace and operations other than war. Interservice rivalry today, just like half a century ago, centers on budgetary issues:

History reveals a tendency for the services to diverge rather than coalesce during periods of relative fiscal austerity. That is, each service tends to put planning priority on assuring and protecting core competencies at the expense of those capabilities that support and facilitate operations of the other services. ...parochialism is stronger when budgets draw down.⁶⁵

It may be time for another Key West. Many of the recommendations of the Commission on Roles and Missions of the Armed Forces appear to be sound, but interservice rivalry remains a serious issue. Bitter disputes of the type that characterized the "Revolt of the Admirals" nearly fifty years ago and the more recent clashes over deep strike, space and tactical air forces of the last few years are counter-productive. This is not to say that competition is unfavorable. As Arthur Hugh Clough states in The Latest Decalogue, "Thou shalt not covet; but tradition approves all forms of competition." The Commission on Roles and Missions also supported constructive competition between the services, stressing that:

...it is necessary to place a high value on broad Service competition. To some this is a counter-intuitive finding. But competition among the Services produces innovation in weapon systems, forces, doctrine and concepts of operations that yield the dramatically superior military capabilities we need. America must not lose that edge.⁶⁶

What appears to be needed, is a redefinition of roles and missions that addresses how each service can be best utilized to meet the needs of the

⁶⁵ Owens, William A., "JROC: Harnessing the Revolution in Military Affairs," *Joint Force Quarterly*, No.5, Summer, 1994, p. 57.

⁶⁶ U.S. Commission on Roles and Missions of the Armed Forces, *Preface*.

CINCs of the unified combatant commands. If overlap of missions occurs or redundancy in capabilities are called for, then so be it. Collins (1995) asserts, "Overlapping responsibilities...can sometimes cost-effectively create multifaceted capabilities that complicate enemy responses."⁶⁷

Many observers, including Senator Nunn, have termed the 1948 Key West agreement a failure because it did not address redundancy and duplication, and because it simply restated the positions of each service, giving them exactly what they wanted. The relatively weak positions of the Secretary of Defense and the Chairman of the Joint Chiefs at the time probably better accounts for the perceived failures. With the greatly enhanced authority and control given to the Secretary and Chairman, accord and compromise on roles and missions between the services can now be achieved, albeit slowly.

The roles and missions of the post-Cold War military must be defined by the senior leadership of the services, the Joint Chiefs, the service secretaries, and the Secretary of Defense. It may be argued that, as in 1948, those most knowledgeable and sensitive to the functions of the Armed Forces are in the leadership of the military, not Congress, especially in light of the fact that there are significantly fewer military veterans in Congress today than fifty years ago.

The Goldwater-Nichols Defense Reorganization Act of 1986 is an effective and necessary tool for reform of the Defense Department. As former Secretary of Defense Dick Cheney commented:

⁶⁷ Collins, p. 28.

I am personally persuaded that [Goldwater-Nichols] was the most far-reaching piece of legislation affecting the Department since the original National Security Act of 1947. Clearly, it made a major contribution to our recent military successes.⁶⁸

The Goldwater-Nichols appears to be correct in allowing the Chairman of the Joint Chiefs and Secretary of Defense to determine how roles and missions should be defined, modified, and allocated. The post-Cold War military of today and that of the Twenty-first century must adapt to a new national security environment. Part of this adaption will include redefining the roles, missions, and functions of the Armed Forces. As Senator Nunn said in his memorable speech:

We should not go into the future with just a smaller version of our cold war force. We must prepare for a future with a fresh look at the roles and missions that characterized the past 40 years. We must reshape, reconfigure, and modernize our overall forces—not just make them smaller.⁶⁹

⁶⁸ Nunn, p. S9559.

⁶⁹ Ibid., p. S9561.

III. JOINTNESS AND MISSION CONSOLIDATION

Separate ground, sea and air warfare is gone forever. If ever again we should be involved in war, we will fight it in all elements, with all services, as one single concentrated effort.

- President Dwight D. Eisenhower
(*Letter to Congress*, 1958)

Jointness is the term applied to the concept of combined military operations and support functions between separate military services. Some see jointness as means to eliminate wasteful duplication, while others see it as increased effectiveness through teamwork and cooperation.¹ History is full of examples of the triumphs and tribulations of joint warfare. At present, joint cooperation among the services is of paramount concern. The Goldwater-Nichols Defense Reorganization Act of 1986 is by far the most powerful force behind the push for joint interoperability among the armed forces. Many observers see the failure of joint military campaigns such as Vietnam, the ill-fated hostage rescue attempt in Iran and the disorganized and uncoordinated, albeit successful, invasion of Grenada as causes for the Goldwater-Nichols Act and its insistence on jointness. The common thread in all of these allegedly "failed" operations has been identified by some as interservice rivalry. The Goldwater-Nichols Act identified interservice rivalry as an obstacle to jointness.² Overcoming the parochialism inherent in each branch of the armed forces is essential to true joint interoperability.

¹ Cropsey, Seth., "The Limits of Jointness," *Joint Forces Quarterly*, No. 1, Summer, 1993, p. 72.

² *Ibid.*, p. 73.

The sudden end of the Cold War was not envisioned by lawmakers when the 1986 Act was passed. However, as is always the case, the end of a war spawns dramatic reductions in defense spending and sparks renewed friction between the services. In an effort to ease the impact of fiscal austerity during the post-Cold War drawdown while continuing to maintain a strong National Defense structure, the Pentagon has begun consolidating missions common to two or more services under the control of a single service when feasible and hopefully without decreasing overall defense capabilities. These consolidations have occurred in almost every aspect of defense from education and training to support functions to tactical aircraft. Mission consolidation can also create mission competition as each service scrambles to gain “executive agency” control over a program or mission. As can be expected, the ultimate goal of this competition is often increased budget authority for the service who “wins.”

This chapter will concentrate on describing jointness and recent efforts at mission consolidation and the competition borne of its necessity. The chapter is organized into five topical areas. First, an historical account of interoperability and joint warfighting’s successes and failures leading up to the 1986 Goldwater-Nichols Act will be presented. Section B will highlight the Act itself and its successes and shortcomings, while Section C will discuss the key recommendations of the Commission on Roles and Missions of 1995 that address various aspects of jointness that are seen by many as improvements on the Defense Reorganization Act. Section D will visit the concepts of mission consolidation and the ensuing competition for missions as well as key examples of both. The final section will present summary and concluding remarks.

A. A BRIEF HISTORY OF JOINTNESS AND UNIFIED OPERATIONS FROM THE CLASSICAL AGE TO THE 20TH CENTURY

The Joint Chiefs of Staff publication "Joint Warfare of the US Armed Forces" (Joint Pub 1), states that the new global environment, the rapid evolution of technology, high speed communications which accelerate the pace of battle and most importantly people, are the key points of modern warfare.³ Joint Pub 1 further states that the advent of technology has forced members of different services to work together like never before and that "...there is no place for rivalry that seeks to under cut or denigrate fellow members of the joint team."⁴ Instances of successful joint operations during the Civil War's Mississippi River Valley campaign, the Solomon Island operations of World War II, and General MacArthur's famous assault on Inchon in Korea are used to highlight the importance of joint operations in modern warfare. Jointness, however, is not a new concept. Instances of unified military operations can be found going back to the beginning of written history.

1. Amphibious Operations and Joint Warfare from Ancient Greece through the War of 1812

The Athenian defeat of the Persians at Salamis (480 B.C.) saw the first extensive use of *Hoplites*—the classical age's version of Marines, while their victory over Sparta at Pylos gave rise to extensive use of amphibious warfare

³ Powell, Colin L. and the Joint Chiefs of Staff, Joint Warfare of the U.S. Armed Forces, Joint Pub 1, Washington, D.C., National Defense University Press, 1991, pp. 2-3.

⁴ Ibid., p. 4.

and joint land/sea integration. However, not all these jointly fought battles can be viewed as successes. The “great victory” at Pylos planted the seed of utter defeat as Athenian commanders attempted a similar amphibious operation at Syracuse on the island of Sicily only to lose 50,000 men and 200 warships—leading to their ultimate defeat at the hands of the Spartans. The Peloponnesian War “...saw the zenith and nadir of Athenian grand plans hinging on jointness, as an undertaking that yielded great success led to greater failure later.”⁵ In Roman times, Julius Caesar’s amphibious landings in Britain in 55 B.C. and Emperor Claudius’s joint campaign at Kent thirteen years later placed the Britons under Roman control for the next 500 years.⁶

The greatest and most successful practitioners of joint operations of the first millennium A.D. were unarguably the Vikings. Hundreds of years of a commitment to joint warfare ultimately led to the establishment of the Norman colonies and kingdoms of Europe.

The Vikings’ method of war was the essence of jointness. They carried horses in their ships...and in sea fights, like the Romans, they relied on infantry afloat. They eschewed ramming, and lashed their ships together, the crews sometimes clambering across vast clusters to mass at the points of heaviest fighting.⁷

The introduction of gunpowder and naval gunfire, changed the face of joint operations considerably, as navies switched from galleys to large heavily armed sailing ships characteristic of the mid to late 1500s. Probably the most

⁵ Beaumont, Roger A., Joint Military Operations: A Short History, Westport, Connecticut, Greenwood Press, 1993, p. 4.

⁶ Ibid., pp. 5-6.

⁷ Ibid., p. 7.

noteworthy joint operation of that time period was the ill-fated Spanish Armada of 1588. The Force was initially composed of 560 ships that would carry 35,000 soldiers to England. The disasters that befell them are well known if not the specifics.

The seventeenth century witnessed a great rise of the maritime powers of Italy, Portugal, Spain, France and England. Enormous advances in technology allowed for the expansion of their spheres of influence to Africa, the Americas, and the Far East. With so much at stake, huge battle fleets and forces of marines were sent to protect national interests around the globe. Numerous joint operations of varying scales took place. These expeditionary forces and the conflicts that ensued continued on well into the eighteenth century. It is at this point in history that numerous accounts of interservice bickering among commanders led to defeat in joint warfare. For example, England's failed Cartagena expedition in 1745 as well as the disastrous assault against the French stronghold at Rochefort 12 years later were both blamed on friction between the army and navy commanders. However, the lessons learned from these failed campaigns were used successfully by Royal Army General James Wolfe and Royal Navy Admiral Charles Saunders when they directed the series of joint operations that led to France's defeat at Quebec in 1759. This cooperation between commanders from different services did not set a precedent as interservice squabbling continued to plague later British joint operations during the American Revolution.

The first attempt at a major combined naval and ground assault during the revolution did not fare well. In 1776, British Lieutenant General Sir Henry

Clinton and Admiral Sir Peter Parker set upon Charleston, South Carolina. The assault failed miserably due to the failure of the two commanders to agree on a plan of battle, coordinate their attacks, and their underestimation of the colonist's resolve.⁸

However, the British enjoyed other victories due to well planned joint operations during the American revolution. In 1778, Colonel Archibald Campbell and 3,000 crack troops were escorted up the Savannah River and executed a very successful combined assault on the city of Savannah. Four years after his embarrassing defeat, General Clinton returned to Charleston with Admiral Mariot Arbuthnot and through "...a superb example of a beautifully coordinated eighteenth-century joint operations" defeated and occupied the Charleston peninsula.⁹

During the War of 1812, the United States suffered heavy naval losses in the early years of the war. It appeared that the British would be able to strike American ports with impunity as evidenced by the landing of 5,000 British troops at the Patuxent River and their subsequent occupation of Washington D.C. However, shortly after the British departed the Capitol, their attempts to take Baltimore and Fort McHenry with combined forces failed miserably. The final embarrassment to British joint operations during the war came in December, 1815 when Major General Andrew Jackson repelled some

⁸ Lumpkin, Henry, From Savannah to Yorktown: the American Revolution in the South, Columbia, S.C., University of South Carolina Press, 1981, p. 10-18.

⁹ Ibid., p. 41.

7,500 veteran British soldiers during an amphibious attack on New Orleans. The British lost over one third of their forces and their three senior commanders. The Americans suffered seven killed and six wounded. Author Wilbur S. Brown ascribes these disasters of joint warfare to "...the greed of some commanders and speculators, major disagreement between Army and Navy leaders, and bureaucratic delay on the part of the admiralty."¹⁰

2. American Joint Operations in the 19th Century

After solidifying the position of the Navy and Marine Corps during actions against the Barbary Pirates and the Navy/Marine assault on Tripoli in 1804, amphibious and joint warfare became key elements to America's wartime strategy. However, large scale joint operations were not seen again until the War with Mexico. The famous joint assault on Vera Cruz in 1847, although successful, was not the model of interservice cooperation that all involved envisioned:

As preparation [for the assault] began in earnest, lack of interservice coordination was reflected in the delay of eight warships and in major snarls in the assembling of transport and supply vessels in the gulf. Bureaucratic confusion, delay, and poor rapport were paralleled by intra-service political tensions between generals [Winfield] Scott and [Zachary] Taylor.¹¹

Even though service cooperation was a major stumbling block, the results of the campaign led to the capture of Mexico City, and Vera Cruz became a model for joint operations well into the next century.

¹⁰ Beaumont, pp. 16-17.

¹¹ Ibid., p. 19.

The numerous joint operations during the Civil War were often marred by interservice friction and politics. In fact, Alfred Thayer Mahan wrote that the concept of jointness at the time was:

...the established rule by which, when military and naval forces are acting together, the commander of each branch decides what he can or can not do, and is not under the control of the other, whatever the relative rank.¹²

Despite this unwritten rule, General Ulysses S. Grant along with Flag Officer Andrew Hull Foote and later Rear Admiral David Dixon Porter launched the successful riverine campaign against Confederate strongholds in the Mississippi River Valley. The common goals of their military strategy and the abandonment of interservice rivalry were key aspects of the campaign which effectively split the Confederacy in two. However, displays of interservice parochialism affected many other joint endeavors during the war. Most notably the failure of the strategically critical Red River expedition of 1864. It has been asserted that many of the failures of joint operations between the Union Army and Navy can be directly connected to the personal hostilities between the Secretary of War Edwin Stanton and Secretary of the Navy Gideon Welles.¹³

After the Civil War ended, joint operations again faded from the forefront of military thinking. It wasn't until the onset of the Spanish-American War that combined operations became a necessity. Since the Army and Navy had

¹² Mahan, Alfred Thayer, The Gulf and Inland Waters, New York, Charles Scribner's Sons, 1883, p. 20. (From Joint Pub 1)

¹³ Beaumont, p. 26.

little reason to interact during the relatively quiet years between the wars, service parochialism and animosity was excessive at the outbreak of war in 1898.

Years of separate missions, geographic dispersion, inaction, and competition for scarce resources had produced a keen parochialism that became open hostility during operations in Cuba and continued into the Philippine Insurrection.¹⁴

The animosity between Major General William Shafter and Admiral William Sampson during the siege of Santiago, Cuba was evidence of the problems faced by joint operations during the war. As evidenced by Navy/Marine accomplishments during the Philippine Insurrection, subsequent joint operations and colonial incursions by U.S. armed forces, were left to the Department of the Navy.

3. American Joint Strategy from World War I to Grenada

Even though American involvement in World War I was short-lived compared to the rest of the combatants, two very crucial aspects of American joint military strategy were involved. First, the use of the United States Marine Corps alongside Army units in extended land campaigns was a major shift in military thinking. The Marines were up to the challenge and further solidified their position as a formidable fighting force. The introduction of air assets was another factor that would change the face of warfighting forever. It was only at the very end that aircraft were used in direct support of land operations, but the tactic known as Close Air Support would become a key element of joint operations in subsequent conflicts.

¹⁴ Ibid., p. 32

Between the Great War and World War II, joint interoperability was not as easily pushed out of the spotlight as it had in earlier periods of peace. The National Defense Act of 1920, although flawed and weighted considerably on the side of the Army, established a Joint Board which was composed of representatives from both the Army War Plans Division and the Navy Chief of Naval Operations Staff. The board met often in the twenty years between the wars, and discussed strategic issues on a scale heretofore unheard of. Though not completely “joint” by modern standards, the seeds for increased interservice cooperation during conflict were sown.¹⁵ The increasing use of air power for coastal defense and the growing conflicts between the air arms of the Army and Navy would set the stage for the bitter and often costly disputes and inefficiencies that would hinder joint operations in future conflicts.

By the time America became involved in World War II, it was clear that single-service operations would be the exception rather than the rule. Losses in Norway and the successful yet disjointed evacuation of forces at Dunkirk early in the war served as painful lessons for the allies that joint operations were the key to survival and victory. In Europe, joint allied operations in North Africa, Sicily and southern Italy taught valuable lessons to allied commanders:

Each landing in the sequence sharpened Allied skills in joint operations in several dimensions, each teaching a new set of bitter lessons, as earlier failures had.¹⁶

¹⁵ *Ibid.*, pp. 65-67.

¹⁶ *Ibid.*, p. 90.

These lessons, often painful and costly, led to the maturing in interservice and allied cooperation highlighted by Operation Overlord, the allied invasion of Normandy. The key to success was once again unity of command, an abandonment of friction between services and allies, and common purpose in the overall objective.¹⁷ This cooperation served as the benchmark for other combined operations in Europe culminating with the tri-service crossing of the Rhine in March 1945.

The Pacific campaign after Pearl Harbor was defined by joint operations from the Solomon Islands to Okinawa. Although not always successful, combined warfare was the key to success in the Pacific. The invasion of Guadalcanal in August 1942 pitted combined Marine, Army and Navy forces against deeply entrenched Japanese defenders and ships. The "Cactus Air Force" a unique combination of Army, Navy and Marine aircraft were vital to the success of the campaign. As Eric Larrabee commented in Commander in Chief:

No episode in World War II better illustrates than Guadalcanal the interdependence of the services that is characteristic of 'modern war.' Any one of the military arms of land, sea, or sky could have thrown away the issue; none alone could gain it.¹⁸

Victory was gained through jointness. Interservice cooperation continued during General Douglas MacArthur's "Island Hopping" campaign and "...was a product of MacArthur's close rapport with his air chief, George Kenney, and

¹⁷ Powell, pp. 49-50.

¹⁸ Larrabee, Eric, Commander in Chief: Franklin Delano Roosevelt, His Lieutenants, and Their War, New York, Harper & Row, 1987, p. 261.

Admiral William 'Bull' Halsey, and their staffs.”¹⁹ Culminating in the bloody victory at Okinawa in July, 1945, unified operations proved to be the essential ingredient in allied strategy in the Pacific.

When World War II ended, America was faced with a new global environment. The introduction of nuclear arms and the dissolution of the Russo-American alliance into the Cold War, placed the victorious U.S. armed services in unfamiliar position of war during peace. With the battle won, the heads of the military and civilian lawmakers turned to an internal battle over unification and the status of air forces. In 1947, the National Security Act, also known as the “Unification Act” established the Air Force as a separate service and made the Joint Chiefs of Staff, unofficially organized in 1942, a permanent fixture in the new Department of Defense. Though designed to promote jointness, the Act instead ignited the series of unprecedented squabbles and outright confrontations between the services described in the previous chapter. The battle for control of nuclear munitions and budget dollars continued for three years and jointness fell from the services’ lists of priorities.

When the North Koreans crossed the 38th parallel in June, 1950, America was ill-prepared for another war and even less so for joint operations. The Marine Corps troop strength had been drastically reduced and the Navy’s World War II peak of 600 amphibious ships had declined to less than 100. Regardless of their dwindling numbers the Navy-Marine Corps team were called upon by General MacArthur to provide naval and amphibious services for his plans to strike the rear of the North Korean Army at Inchon. Ever

¹⁹ Beaumont, p. 101.

mindful of the recent "War of the Potomac" between the services after WWII, MacArthur found himself, "...clasping hands over the bloody chasm of interservice rivalry that had only just begun to close..."²⁰ Operation Chromite, codeword for the Inchon landing, was an operation reminiscent of World War II. Planners and commanders had a goal, made every attempt at overcoming friction between the services, and within three months executed the operation that turned the tide of the Korean conflict. President Truman's position on jointness was evident in his congratulatory message to General MacArthur:

I am particularly impressed by the splendid cooperation of our Army, Navy and Air Force...the unification of our arms established by you and by them has set a shining example.²¹

Although a striking example of joint warfare, the assault at Inchon would prove to be the last major amphibious operation against strong resistance in modern American military history.

The Defense Reorganization Act of 1958 further attempted at promoting jointness between the services, by strengthening the position of the Chairman of the Joint Chiefs of Staff and establishing the unified and specialized commands. Unfortunately, seamless coordination between the services seemed out of reach. The ongoing battle between the Army and the Air Force over control of close air support assets and the continued friction between all the services regarding strategic nuclear weapons hindered progress towards jointness. Each service continued to operate independently with

²⁰ Ibid., p. 139.

²¹ Truman, Harry S., Memoirs by Harry S. Truman (Volume Two): Years of Trial and Hope. Garden City, N.Y., Doubleday & Company Inc., 1956, p. 360.

respect to support, communications and hardware. Even with the strengthening of the Joint Chiefs of Staff through the 1958 legislation, the JCS continued to perform in a largely advisory capacity that mediated compromises between the individual services. "With no direct involvement in the budget process, its guidance of defense doctrine and structure was by general directive rather than firm control."²² This inability to control military doctrine or control over the services' intense parochialism led to the failure of jointness in Vietnam.

The unified command structure in South Vietnam known as the Military Assistance Command Vietnam (MACV), was not a true unified command since it was subordinated to the Navy Commander in Chief Pacific Command in Hawaii. Its inability to control joint operations is evidenced by the separate air wars waged by the Air Force and Navy. Although joint operations did occur during the war at lower operational levels, the overall war was "...fought with far less jointness than World War II or even Korea."²³ However, several relatively joint concepts such as the dual development and employment of the F-4 Phantom fighter by both the Navy and Air Force and the combined riverine operations of the Army and Navy did emerge as positive examples during Vietnam. The failure of jointness is only a small fraction of the troubles

²² Beaumont, p. 147.

²³ Ibid., pp. 148-150.

that caused the debacle of the Vietnam conflict. Political interference from the highest levels was also a major contributor that would become predominate in the decade between Vietnam and the Invasion of Grenada.

Failures of joint operations in the 1970s did little to allay the growing fear in Congress that the services were unable to operate together. The "*Mayaguez* Incident" of May 1975, although successful in its mission of rescuing 39 merchant seamen taken hostage by the Khmer Rouge, was an example of the difficulties that the services experienced in joint operations. Poor exchange of intelligence, confusion between commanders, and unfamiliarity with sister service procedures left a body count of 41 Marines and airmen at the end of the 14 hour battle.²⁴ Fifteen years later in April 1980, two helicopters collided and crashed in the Iranian desert during Operation Eagle Claw—the attempt to rescue the American hostages in Tehran. The failure of the operation, also known as Desert One, "...was caused in part by a jury-rigged rescue 'team' unnaturally composed of members from all three services who had not trained together."²⁵ Clearly not the embodiment of true joint interoperability.

The final U.S. joint operation prior to passage of the Goldwater-Nichols Act was the successful, but problem-plagued invasion of the island of Grenada in 1983. Originally exhibited as a model of joint warfare, evidence to the contrary surfaced in the following months. Examples of failures in joint

²⁴ "The Mayaguez-What Went Right, Wrong", *U.S. News & World Report*, 78:22, June 2, 1975, p.29.

²⁵ Grossman, Larry, "Beyond Rivalry," *Government Executive*, 23:6, June, 1991, p. 11.

interoperability abound. When battle damaged Army helicopters landed aboard a Navy carrier, an urgent message from the Navy Comptroller's office advised the operation's commander, Admiral Wesley McDonald, not to fuel any Army helicopters because the Army had failed to sign the paperwork agreeing to reimburse the Navy for the fuel! In another case, Army helicopters carrying wounded soldiers were denied permission to land aboard ship because they did not have the necessary at-sea landing qualifications. Perhaps the most publicized and embarrassing occurrence highlighted the lack of integrated communications between the services. An army unit pinned down by enemy fire was unable to call for close air support because they could not contact Air Force assets standing by. "The stranded Army unit received air support only after a quick-thinking soldier appealed for help by using his telephone credit card to call the Army base at Fort Bragg, N.C., from a local phone."²⁶ By the mid-1980s, the lack of joint interoperability between the services was painfully apparent. Debates inside Congress and within the Pentagon called for a serious and effective reorganization of the Department of Defense. Senator Sam Nunn spoke for many in Congress when he said:

A close look at the Grenada operation can only lead to the conclusion that, despite our victory and success, despite the performance of individual troops who fought bravely, the U.S. armed forces have serious problems conducting joint operations.²⁷

²⁶ Hadley, Arthur T., "The Split Military Psyche," *The New York Times*, July 13, 1986, p. 26-33.

²⁷ Herres, Robert T., "Making Interoperability & Jointness a Way of Life," *Defense '88*, January/February, 1988, p. 22.

B. THE GOLDWATER-NICHOLS DEFENSE REORGANIZATION ACT'S EMPHASIS ON JOINTNESS

The 1986 Defense Reorganization Act, commonly known as the Goldwater-Nichols Act, ushered in a 'bright new era' of interservice cooperation and integration that culminated in the unparalleled successes of Operation Desert Storm in 1991.²⁸

The Goldwater-Nichols Act significantly enhanced the position of the Chairman of the Joint Chiefs of Staff, increased the powers of the Commanders in Chief of the Unified Commands, streamlined command relationships and established powerful requirements for joint duty officers, removing the stigma of joint staff duty. Interestingly, the Act went against Congress' traditional aversion toward consolidating power within an executive branch agency. Normally Congress tried to create divisions within such agencies allowing lawmakers to maintain substantial legislative control, especially when it came to the Department of Defense.²⁹ Not as unusual though was the opposition of Defense Secretary Casper Weinberger and other senior service leaders. "Because the reorganization act upset longstanding relationships and changed the balance of power at high levels of the military, many in the Pentagon resisted it."³⁰

²⁸ Quigley, John M., "Creating Joint Warfighters," *U.S. Naval Institute Proceedings*, 121:9, September, 1995, p. 62.

²⁹ McNaugher, p. 219-220.

³⁰ Grossman, p. 10.

1. Major Provisions of Goldwater-Nichols

The most significant change to the existing defense structure was the enhanced powers and autonomy given to the Chairman of the Joint Chiefs. Prior to enactment of the Act, the Chairman was limited in his powers over the Joint Chiefs. If the Chairman was unable to extract a unanimous decision from the service chiefs on a particular issue, the issue was likely postponed without resolution.³¹ However, Goldwater-Nichols subordinated the Joint Chiefs to the Chairman who became the principal military advisor to the President, the National Security Council, and the Secretary of Defense.³² Congress' intent was to ensure that teamwork and jointness within the Pentagon overruled the designs of the parochial service chiefs:

The fundamental purpose of this bill is to refine the role of the chairman of the Joint Chiefs of Staff. The bill would enable the chairman...to transcend the service-orientation of the respective service chiefs to provide clear-cut, objective military advice to the national command authorities.³³

Additionally, the Chairman's powers were expanded in areas of strategic direction and planning as well as advising on requirements, programs and budget matters for the Commanders in Chief of the Unified Command.

³¹ Smith, Perry M., Assignment Pentagon: the Insider's Guide to the Potomac Puzzle Palace, Washington D.C., Pergamon-Brassey, 1989, p. 125.

³² U.S. Congress, *The Goldwater-Nichols Department of Defense Reorganization Act of 1986*, Public Law 99-433 (100 Stat. 992-1075a), 99th Congress: §151b.

³³ U.S. Congress, House, *Joint Chiefs of Staff Reorganization Act of 1985*, Report from the House Committee on Armed Services to Accompany H.R. 3622, Report 99-375, 99th Congress: §2.

Opposition to the idea of a powerful Chairman was considerable. Many argued that a strong central military structure appeared as a move towards militarism.³⁴ Also, as the primary military advisor, the National Command Authority would be deprived of alternative courses of action. Others, including former Chairman Air Force General David C. Jones, felt that a stronger Chairman was the key to avoiding the interservice power plays that resulted in the Desert One debacle and confusion in Grenada.³⁵

In addition to expanded roles for the Chairman, the office of the Vice Chairman was created, as the second ranking officer in the military, the Vice Chairman spoke for the Chairman in his absence. The Chairman and the Vice-Chairman may not be from the same service a design to prevent parochialism at that level. Though not specifically set forth in the legislation, the position of Vice Chairman as the presiding member of the Joint Requirements Oversight Council (JROC) was instrumental in the elimination of wasteful duplication and fraud that characterized the defense procurement system in the 1980s.

Another significant provision of Goldwater-Nichols is the streamlining of the chain of command within the Department of Defense. The individual service chiefs were removed from the operational chain of command in relation to the Commanders in Chief. The new chain of command now runs from the President to the Secretary of Defense to the CINCs. This provision gives the CINCs considerably greater latitude in how to manage the forces under

³⁴ McNaugher, p. 237-238.

³⁵ Grossman, Larry, "A Joint Venture?," *Government Executive*, 23:7, July, 1991, p. 14.

them—a direct improvement in joint operability. This streamlining and more joint approach to the chain of command may have considerable effects on the budgetary system as well. Section 166 of the Act directs the Secretary of Defense to submit separate budget proposals for each of the unified commands. “With the CINCs now more firmly in command and the chairman of the JCS and the joint staff expanding their purview, the budget process too seems to be shifting slightly away from the services and service secretaries and toward the unified and specified commands.”³⁶

The last major stipulation of the legislation is Title IV, “Joint Officer Personnel Policy.” This section directs that “[a]n officer may not be selected for promotion to the grade of brigadier general or rear admiral (lower half) unless the officer has served in a joint duty assignment.”³⁷ This is a direct effort to promote joint cooperation in the highest ranks of the military, where failures in joint operations historically are found. In the past, services were inclined to send less qualified or career-minded officers to joint staff billets, opting to keep their most skilled and promotable officers close to the fold. The problem with this practice was that officers became so ingrained with the views and parochial interests of their parent service, they became the source of the interservice rivalry that crippled past joint operations. The framer’s intentions

³⁶ McNaugher, p. 245.

³⁷ Goldwater-Nichols Act, Sec. 404, 100 STAT 1032.

seem to have been met. The Goldwater-Nichols Acts attempts at promoting joint cooperation within the Department of Defense can be reflected in the successes of military operations in the decade since its enactment.

2. Joint Operations Since 1986 - The Success of Goldwater-Nichols

The U.S. armed forces have been involved in more than half a dozen joint military operations from Operation Just Cause in Panama to Operation Joint Endeavor in the Balkans since Goldwater-Nichols was signed into law. Compared to the failures of joint operations prior to Goldwater-Nichols, these operations have been extremely successful. Most significantly the liberation of Kuwait in Operation Desert Storm. Many observers both inside and outside the Department of Defense attribute the effectiveness of these operations and the improved service attitude toward jointness directly to Goldwater-Nichols. Senator Sam Nunn in his July 1992 floor speech to the Senate stated:

The Goldwater-Nichols Act in 1986 was the most far-reaching step yet taken to create a coherent, efficient, and effective Defense Establishment...We saw the first tangible fruits of that act in operation Just Cause in Panama and Operation Desert Shield/Desert Storm in Southwest Asia. For the first time, the services were integrated in a way that combined the unique strengths of the individual services.³⁸

Both General Norman Schwarzkopf, Commander in Chief of Central Command and Coalition Force Commander during Desert Storm and Secretary of Defense Dick Cheney echoed Senator Nunn's sentiments. With the more powerful role of the Chairman of the Joint Chiefs and the streamlined

³⁸ Nunn, p. S9559.

chain of command from the President to the Combatant Commanders, there is little wonder that the services have finally fallen in line with the concept of jointness.

Other observers caution that the successes of American joint operations of the past decade are not as clear cut as Senator Nunn believes citing major shortfalls in airlift and sealift support and reports that nearly 25 percent of American casualties during Operation Desert Storm were the result of friendly fire incidents.³⁹ Command and control communications and doctrinal deficiencies are cited by others. Nevertheless, “[w]hen comparing the performance of the U.S. forces in Operations Just Cause, Desert Storm, and Provide Comfort with Vietnam, Desert I, and Grenada, it is hard to argue that change was not for the better.”⁴⁰

3. Shortcomings of the Defense Reorganization Act of 1986

Shortly after the end of hostilities in the Gulf War, several witnesses testified before the House Armed Services Committee including former Secretary of Defense Harold Brown, former Chairman of the Joint Chiefs of Staff General David C. Jones, and former CINC of the Atlantic Command Admiral Harry Train. All of them generally agreed that major improvements in America’s defense organization and ability to operate jointly could be credited to Goldwater-Nichols.⁴¹ The celebrated mastermind behind the logistical

³⁹ Beaumont, p. 173-174.

⁴⁰ Chiarelli, Peter W., “Beyond Goldwater-Nichols,” *Joint Force Quarterly*, No. 2, Autumn, 1993, p. 74.

⁴¹ McNaugher, p. 245.

success of Desert Storm, Lieutenant General William "Gus" Pagonis testified "...that he could not have done his job—moving a city the size of Charleston, S.C., halfway around the globe in five months—before Goldwater-Nichols."⁴² Even the most casual observer of military operations since 1986 must admit that there has been significant improvements in the way the armed forces have performed.

Goldwater-Nichols can certainly be given credit for a significant share of that success. However, as the United States has become more involved in peacekeeping operations and other joint activities, shortfalls in the decade old legislation have come to the forefront. This is not to criticize the landmark legislation, only to indicate that more can be done to improve joint interoperability among the services. Of key concern to many in the Defense Department are the requirements for joint staff education and experience. Also, personal experience in Operation Southern Watch, the no-fly zone in southern Iraq, highlighted continued difficulties with interservice operations, tactics and communications at the tactical level between the services that still exist.

The 1986 Reorganization Act imposed rigorous standards on the promotability of military officers to flag or general grade, requiring that all officers to carry a "joint specialty" in addition to their military occupational specialty. In order to earn the joint specialty designation, an officer must: "(A) successfully complete an appropriate program at a joint professional military education school; and (B) after completing such program of education,

⁴² Grossman, "Beyond Rivalry," p. 11.

successfully complete a full tour of duty in a joint duty assignment.”⁴³ Depending on the type of education and the length of the joint duty tour, an officer can spend between three and six years earning the necessary qualifications for promotion to the O-7 level. This is a considerable amount of time spent away from the duties for which the officer is primarily trained. Many critics agree that while being educated in multi-service matters and serving on a joint staff lends toward improved jointness among the armed services, but this training is largely strategic and organizational in nature with “...little focus or emphasis placed on *actual operations and tactics*.”⁴⁴ Other critics go further stating that training literally thousands of officers to ensure promotability to a rank that less than 1 percent will attain not only stretches the resources of personnel commands, but “...is likely to generate a crowd of dilettantes instead of a corps of skilled officers.”⁴⁵ Proposed corrections to this deficiency is the addition of tactical joint and exchange billets to the Joint Specialty Assignment List or the creation of a “mini-joint subspecialty” for critically needed operational specialists and warfighters from communities that require a high level of interservice operability such as tactical aviation.⁴⁶

⁴³ Goldwater-Nichols Act, § 661, 100 STAT 1026.

⁴⁴ Quigley, p. 62.

⁴⁵ Holland, W. J. jr., “Jointness Has Its Limits,” *U.S. Naval Institute Proceedings*, 119:5, May, 1993, p. 39.

⁴⁶ See: Palzkill, Dennis, “Making Interoperability Work,” *U.S. Naval Institute Proceedings*, 117:9, September, 1991, and John M. Quigley, “Creating Joint Warfighters.”

The problems with the joint education and subspecialty requirements lead to further deficiencies at the operational level. From personal experience during Operation Southern Watch, jointness is a necessity borne of both fiscal and strategic requirements, but at the operational level, service specific tactics, doctrine and procedures hinder the interoperability so necessary for success in both peace and war. During Desert Storm, the daily Air Tasking Order (ATO) that designated targets and strike package specifics had to be flown from headquarters in Saudi Arabia to aircraft carriers in the Arabian Gulf because of a lack of a secure means of communications between the ships and land. Additionally, planners in Riyadh failed to take into consideration armament restrictions unique to carrier operations. During "STRIKE-EX '94," a semi-annual multi-service, multi-national joint air operation in the skies of Southern Iraq, the "box" as it is called by those that enforce the no-fly zone had to be divided into three separate areas. One for British and French coalition aircraft, one for the Air Force and one for the Navy due to differences in tactics, doctrine and airborne refueling configurations.

Although touted as a major joint exercise, in reality the evolution was three separate events conducted at the same time in close proximity. Though communications between the carriers at sea and Air Force assets in Dhahran, Saudi Arabia have been vastly improved, other aspects of the ATO still plague joint interoperability. During combined U.S.-NATO air strikes in Bosnia during 1995, conflicts ranging from tactics to weaponeering to simple flight line

procedures caused consternation and confusion at Aviano Airbase in Italy.⁴⁷ Although these stumbling blocks will not derail the ongoing trend towards jointness, they do highlight shortcomings in the Goldwater-Nichols Defense Reorganization Act. The 1995 Commission on Roles and Missions has made attempts at identifying courses of action that hope to rectify these and other imperfections in the legislation.

C. THE COMMISSION ON ROLES AND MISSIONS: STEPS TOWARD JOINTNESS

As described in the previous chapter, the May 1995 *Report of the Commission on Roles and Missions of the Armed Forces* was not a guide for redefining or reallocating the roles and missions of the U.S. military. Instead, it provided a series of broad recommendations to enhance joint interoperability between the services through increased support of the CINCs:

The central message for DOD from the Commission on Roles and Missions of the Armed Forces is *in the 21st century, every DOD element must focus on supporting the operations of the Unified Commanders In Chief (CINCs)*. Everything else DOD does...should support that effort.⁴⁸

The Commission recommendations for improved overall joint operational effectiveness was grouped into twelve main categories. The categories that directly addressed the perceived shortcomings in Goldwater-Nichols were: (1) creation of a unified vision for joint operations, (2) strengthening of joint

⁴⁷ Anderson, Jon R., "Rivalries on U.S. Side Emerged in Air strikes," *Air Force Times*, 56:10, October 9, 1995, p. 6.

⁴⁸ U.S. Commission on Roles and Missions of the Armed Forces, p. ES-1.

doctrine, (3) increased support for the CINCs, and (4) improved joint training. Additionally, the Commission recommended consolidation or reorganization of missions and responsibilities in several areas of the Defense Department.⁴⁹

1 . A Unified Vision for Joint Operations

The Commission lauded the individual services for the development of their unique capabilities and their performance during the Gulf War, but pointed out that they still do not work well together. The Commission submitted that this was a direct result of the lack of a unifying vision for development of individual service doctrine. "Not surprisingly, the Services' ideas about how to integrate all forces reflect their own perspectives, typically giving the other Services a role supporting the 'main effort'."⁵⁰ The Commission acknowledged that the various service doctrines of "Forward...From the Sea," "Force XXI" and "Global Reach, Global Power" were integral to the services ability to train and develop, but that these documents lacked unifying guidance that would allow the separate services to act as one during war.

Therefore, the Commission recommended that the Chairman of the Joint Chiefs of Staff develop a joint warfighting vision that would harmonize the doctrines of the individual services. They proposed that the document should give direct guidance to each service on what capabilities the services must provide to unified military operations while indirectly encouraging the

⁴⁹ Ibid., p. 2-1, 2-21.

⁵⁰ Ibid., p. 2-2.

“maturation” of their separate doctrines through development of concepts for how the service can best contribute to overall DOD capabilities.⁵¹

Secretary of Defense Perry enthusiastically agreed with the recommendation and tasked Chairman of the Joint Chiefs, General John Shalikashvili to develop a joint vision for the Department. In July 1996, the Joint Chiefs issued “Joint Vision 2010.” Citing long range precision capabilities, enhanced information warfare and stealth technology as keys to military successes in the future, the document avoids addressing specific programs concentrating on overall defense strategy. Vice Chairman General Joseph Ralston, USAF, stated “This is the yardstick by which service programs will be measured.”⁵² The 38 page document will be expanded into a “Joint Future Operations Document” that is currently being developed by the Joint Warfighting Center at Fort Monroe, Virginia. The 10 volume set is scheduled for released in early September, 1996.

2. Strengthened Joint Doctrine

The Goldwater-Nichols Act directed that part of the expanded responsibilities of the Joint Chiefs of Staff was the development of joint doctrine for the U.S. armed forces. Over a period of six years, the Joint Staff directed each service to develop joint doctrine in each service’s area of expertise. The Commission cited this plan as a reason for the, “...compendium of competing and sometimes incompatible concepts...” that characterized the

⁵¹ *Ibid.*, p. 2-3.

⁵² Holzer, Robert, “JCS Forms Strategy for Future Warfare,” *Defense News*, 11:29, July 22-28, 1996, p. 4.

first generation of joint doctrine publications.⁵³ The members of the Commission felt that the next generation of joint doctrine should be written with a focus on the joint vision statement as proposed in the previous section.

Their recommendation, revision of current joint doctrine development process with a single joint agency as the executive, will begin with the previously discussed "Joint Future Operations Document" being developed at the Joint Warfighting Center. Additionally, the Commission urged the Secretary of Defense to increase the manning and funding for the Joint Warfighting Center which they considered a cornerstone to the department's joint initiatives. In his 1996 "Annual Report to the President and Congress," Secretary Perry indicated that funding for not only the Joint Warfighting Center had been increased in fiscal years 1995 and 1996, but that the Joint Training, Analysis, and Simulation Center had also received a funding boost. Additionally, funding was programmed for the establishment of the Joint Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C⁴ISR) Battle Center.⁵⁴

3. Increased Support for the Commanders in Chief

The Commission also recommended increased support for the CINCs as a tool for increased jointness within the Department of Defense. They felt that the CINCs needed greater influence over the processes used to acquire the

⁵³ U.S. Commission on Roles and Missions of the Armed Forces, p. 2-3.

⁵⁴ Perry, William J., "Annual Report to the President and Congress," Washington, D.C., Government Printing Office, March, 1996, p.47.

weapons, equipment and forces required to fulfill their missions, but at the same time should not be burdened with responsibilities that may divert their efforts away from successful execution of these missions. The Commission cited several areas that could be centralized to assist the CINCs in improved integration of individual service capabilities. These areas covered the spectrum of doctrine and joint concepts in the areas of theater air missile defense to joint logistic capabilities. The Commission also recommended the reorganization of several CINCs Areas of Responsibilities (AORs).⁵⁵

Secretary Perry again agreed with the CORMs recommendations and in response designated the Air Force as executive agent for theater air defense battle management and C4I and joint theater air and missile defense doctrine development.⁵⁶ Additionally, the aforementioned Joint Vision 2010 and its supporting doctrines and the recently C4IST Battle Center were tasked to assist the CINCs in any manner required. On December 28, 1995, President Clinton approved the requested changes to the Unified Command Plan, reassigning geographic areas such as large portions of the Arabian Sea and Indian Ocean to different CINCs. In this case from U.S. Pacific Command to U.S. Central Command.⁵⁷

⁵⁵ U.S. Commission on Roles and Missions of the Armed Forces, p. 2-5, 2-12.

⁵⁶ Perry, William J., "Letter to the Honorable Strom Thurmond, Chairman, Senate Committee on Armed Services," August 24, 1995, p. A-1.

⁵⁷ Perry, "Annual Report to the President and Congress," p. 49.

4. Improved Joint Training for the Department of Defense

Noting that training is the key to service maintenance of core competencies, the CORM expanded that concept to include joint training as fundamental to successful unified military operations. They asserted that in the course of their examinations, joint training was not being performed as effectively as service training. This was not a new or surprising concept for the Chairman of the Joint Chiefs who had commented 9 months earlier: "...When you look at joint training...it's an embarrassment to me. I have gone to more joint exercises and walked away from them more embarrassed than anything else."⁵⁸ To rectify this shortcoming, the Commission recommended that joint training receive increased funding, that the CINCs be given greater control over joint portions of each service's training budget and the creation of a functional unified command responsible for joint training and integration of CONUS based forces.

Both the Chairman and the Secretary of Defense agreed that joint training had to be improved and initiated several studies to investigate the most efficient way of doing so. These studies resulted in increased funding for joint training and the reorganization of U.S. Atlantic Command (USACOM) to

⁵⁸ General John M. Shalikashvili during a speech to the Association of the United States Land Warfare Forum, 1 September 1994. As quoted in the CORM report.

include oversight of joint training of U.S. forces. However, the Chairman recommended to the Dr. Perry, that the assignment of all U.S. based forces to USACOM be deferred until it had effectively assimilated its new roles.⁵⁹

5. Consolidation of Missions and Responsibilities Within the Department of Defense

In addition to the previously mentioned reorganization of the Areas of Responsibilities for several of the unified commands and the expansion of USACOM, the Commission recommended "...reemphasizing traditional Service functions, sharpening the boundaries in some areas where unneeded overlap occurs, and relieving them of responsibilities that detract from their core competencies."⁶⁰ The Commission recognized the importance of each service's core competencies as necessary to enhanced joint effectiveness, but also felt that many of these core competencies had to be integrated across traditional service boundaries. The CORM asserted that this concept held true especially when a service's capabilities had to be interoperable with all the other services capabilities. Since future interoperability issues are the purview of the Joint Requirements Oversight Council, the Commission recommended that three near term interoperability issues should be addressed. Specifically, the Commission recommended that Air Force KC-135 aerial refueling aircraft be equipped with multi-point capacities in order to refuel not only Air Force but Navy, Marine Corps and coalition aircraft as well. The Commission also asserted that all munitions, especially precision weapons, should be useable by

⁵⁹ Perry, "Annual Report to the President and Congress," p. 49.

⁶⁰ U.S. Commission on Roles and Missions of the Armed Forces, p. 2-20.

tactical aircraft of all services. Finally and most relevant to this study, the Commission recommended the expansion and upgrade of the Navy/Marine Corps EA-6B *Prowler* electronic combat aircraft to meet all Department of Defense airborne electronic stand off jamming needs.⁶¹ This recommendation was in direct opposition to the General Colin Powell Roles and Missions Report of 1993 that opposed the idea of consolidating the tactical airborne electronic combat mission under a single service and airframe, citing degraded readiness and capabilities as effects of doing so.

Defense Secretary Perry agreed with these recommendations, directing the Air Force to continue with current plans to equip all KC-10 and KC-135 aerial refueling support aircraft with multi-point capabilities. He also directed the department to investigate the possibility of making all munitions multi-service capable as part of its Military Department Recapitalization plans. The recommendation of establishing the EA-6B as the DODs sole radar jamming aircraft was not a new idea, and a decision to increase funding had already been made.⁶²

Consolidation was not a new concept in May 1995. Earlier studies including General Powell's Roles and Missions study had identified consolidation as a means for cost savings in the face of a rapidly declining post-Cold War defense budget and as a way to enhance the capabilities of the department as

⁶¹ U.S. Commission on Roles and Missions of the Armed Forces, p. 2-21.

⁶² Perry, "Annual Report," p. 48 and Perry, *Letter to Senator Thurmond*.

a whole. The following section highlights key areas that have been consolidated or may be in the future. It will also identify key areas that have become areas of extreme mission competition.

D. MISSION CONSOLIDATION AND COMPETITION AMONG THE SERVICES

Faced with an increasingly smaller share of the federal budget, the Defense Department has turned to consolidation as a means to cut costs while minimizing negative effects on overall Defense Establishment capabilities. This mission consolidation covers the entire spectrum of defense activities from education and training to support functions to warfighting. With the continuing race by the services to establish their roles and missions, competition for control of these consolidated functions as well as emerging missions is keen. Some proponents of jointness see this consolidation as beneficial to interoperability and unified operations. Others are concerned that too much consolidation will irreversibly damage the core competencies that the Commission on Roles and Missions identified as so vital to improved joint military effectiveness.⁶³

1. Mission Consolidation

Consolidation can be done in a variety of ways: under a single service, through the designation of a service as "executive agent" for a mission or function, through privatization or by assigning the area to a joint command or

⁶³ See: Bowes, W. C., "Consolidate, Cut Costs,...But Be Smart," *U.S. Naval Institute Proceedings*, 120:9, September, 1994, pp. 40-42.

oversight committee. Since the end of the Cold War and the ensuing defense drawdown, many areas of the Defense Establishment have been considered for consolidation. General Colin Powell's "Report on the Roles, Missions, and Functions of the Armed Forces of the United States" suggested several areas for consolidation including the Space and Strategic Commands, CONUS based forces under a unified command, depot level maintenance, common aircraft such as the Air Force EC-135 and Navy E-6A, initial fixed-wing flight training, and helicopter maintenance and simulation training. Two years later, the Commission on Roles and Missions suggested even further consolidation in many areas. The Commission recommended centralized intelligence support, establishment of the Air Force as executive agent for space and combat search and rescue, management of all operational support airlift aircraft (excluding Navy Reserve C-9s) under Air Force, consolidation of the Defence Contract Audit Agency and the Defense Contract Management Command under the Under Secretary of Defense for Acquisition and Technology, and the combination of each service's secretariat and service staffs into a single staff. The CORM also recommended the consolidation of medium-altitude air defense and expeditionary engineering responsibilities under the Army, eliminating those missions in the Marine Corps. The Commission went beyond the Powell report recommending the outsourcing of all current support-type activities, all new and emerging support requirements and movement toward a depot maintenance system relying heavily on the private sector. Additionally, the focus of this study, the consolidation of the tactical airborne electronic combat mission under the Navy was also recommended.

Not all of these consolidations have been implemented, but some have with varying levels of success. Institutional and statutory roadblocks have hindered some of these recommendations including the removal of the so-called 60/40 rule of Title 10 of the U.S. Code which prohibits privatization of more than 40 percent of depot level maintenance. Other attempts have been blocked by Congressional action that often reflects lawmakers' constituency concerns. Others, such as the elimination of the EC-135 and expanded use and support of the Navy E-6A *TACAMO* aircraft and the consolidation of basic flight training have produced excellent results.⁶⁴

The push for consolidation is not over yet, the Defense Department is considering combining all rotary wing infrastructure. The plan includes consolidation of all DOD helicopter research and development, test and evaluation, acquisition and training under the Army. Proponents contend that significant cost savings in areas such as logistics and personnel will be realized. The proposal also recommends decreasing the number of different helicopter types from 16 to only four. The proposal also asserts that combining pilot training at Forts Eustis and Rucker would not only decrease the cost of training but standardize operations across the entire DOD while promoting jointness. The plan even suggests consolidating all DOD air traffic control training at Fort Rucker.⁶⁵ There are even calls for the Defense Department to

⁶⁴ See: Viccellio, Henry, jr., "The Challenge to Interservice Training," *Joint Force Quarterly*, No. 7, Spring, 1995, pp. 43-47.

⁶⁵ "Army Formally Proposes Consolidating Helicopter Infrastructure," *Aerospace Daily*, 173:21, February 1, 1995.

consolidate the service academies into a single "U.S. Defense Academy," saving over \$265 million annually while promoting jointness at the earliest point in young officers' careers.⁶⁶

2. Competition Borne of Mission Consolidation and Emerging Mission Areas

The services have almost always opposed consolidation if it means their service will be losing the mission or control over a certain function. On the other hand, if a particular service is in a position to gain from consolidation they are more than willing to take on the added responsibility since more responsibility over a particular area means more budget dollars with which to exercise that authority. Competition for missions today is as keen as it was following World War II. The previously discussed "Revolt of the Admirals" over the competition for the strategic bombing mission is by far the most famous battle over missions. Other historical examples such as airborne coastal defense between the Army Air Corps and the Navy and the air defense missile battle between the Air Force and Army illustrate the motivations behind mission competition.

Today, the same mission competition is apparent in the maneuvering for control of the Deep Strike Mission, Close Air Support, Theater Missile Defense and Space. Each of these missions would provide the service with control increased budgetary authority, acquisition power and influence within the Pentagon.

⁶⁶ Haraden, Timothy J., "Joint from Day One," *U.S. Naval Institute Proceedings*, 121:7, July, 1995, pp. 37-39.

E. SUMMARY AND CONCLUDING REMARKS

This chapter has highlighted the history of jointness and its significance in today's military. Historical insights into the success and failures of joint operations identified interservice rivalry and competition for a "piece of the action" as frequent causes for failure and defeat. The introduction of airpower further blurred the lines between services and increased the need for unity between the services during war. During World War II combined operations in Europe matured into the enormous success of Operation Overlord, the allied invasion of Normandy. Jointness is credited as the key to success in the Pacific beginning with the Solomon Islands in 1942 and culminating with the hard-won victory in Okinawa. The commitment to jointness by commanders in the Pacific can be seen in the following statement made by Admiral William F. "Bull" Halsey in 1942

Gentlemen, we are the South Pacific Fighting Force. I don't want anybody even to be thinking in terms of Army, Navy, or Marines. Every man must understand this, and every man will understand it, if I have to take off his uniform and issue coveralls with 'South Pacific Fighting Force' printed on the seat of his pants.⁶⁷

As with periods of peace before, attitudes toward jointness succumbed to interservice bickering and animosity between World War II and Korea. However, even with interservice gaps still wide, General Douglas MacArthur successfully engineered the last major amphibious joint assault in modern American history at Inchon. The complete breakdown in joint interoperability

⁶⁷ Potter, Elmer Belmont, Bull Halsey, Annapolis, Md., Naval Institute Press, 1985, p. 186.

in Vietnam and Grenada as well as the failed and fatal hostage rescue attempt of Desert One, was the proverbial "straw that broke the camel's back."

In 1986, landmark legislation known as the Goldwater-Nichols Defense Reorganization Act was the first successful attempt at promoting jointness during peacetime. The Act enhanced the powers the Chairman of the Joint Chiefs of Staff elevating him from a position of "first among equals," created the position of the Vice Chairman as the number two ranking officer in the U.S. military, further empowered the Commanders in Chief of the Unified Commands while streamlining the chain of command between the CINCs and the National Command Authority, and established procedures that ensured each service would dedicate its "best and brightest" to joint duty by making the joint specialty designation a prerequisite for promotion to general or flag rank. The influence of the Goldwater-Nichols Act can be seen in successes of joint military operations such as Just Cause in Panama, Restore Democracy in Haiti, and today in Joint Endeavor in the Balkans. Of course, the most prominent achievement in combined warfare and jointness was Operation Desert Storm in 1991. Although many see Desert Storm as a flawless example of the joint interoperability of the American armed forces, many problems were identified—especially in the interoperability of the different services. Other observers feel that Goldwater-Nichols limits the ability of the services to maintain their own individual and diverse identities as well as core competencies in their officer corps.

The Commission on Roles and Missions of the Armed Forces made key recommendations that would enhance the spirit of jointness fostered by

Goldwater-Nichols and the Gulf War. The Commission saw enhanced and total support for the CINCs as the key to improved and effective joint interoperability. The CORM recommended a unified vision for the Department of Defense, a stronger joint doctrine and vastly improved joint training as essential elements to this support. The Commission also recommended the continued consolidation of capabilities within the defense establishment begun by earlier studies including Colin Powell's *Manned Roles and Missions* report of 1993.

Consolidation as a means for cost savings and streamlined joint capabilities has been ongoing since the very beginning of the post-Cold War defense drawdown. Consolidation efforts have affected every facet of the defense infrastructure from flight training to staff and support functions to common aviation assets. The subject of this study is an example of the latter. However, with mission consolidation comes mission competition as each service seeks control of existing and emerging missions for fiscal as well as political reasons. Even as the Defense Department continues down the road to jointness, interservice friction remains.

In today's military characterized by reduced budget authority and increasing world-wide commitments, jointness is required. The individual services can no longer maintain their insular and parochial attitudes and "go it alone." Interservice rivalries that characterized the Vietnam War and the lack of interoperability that led to the disaster of Desert One and confusion in Grenada have been diminished, but not eliminated, by the Goldwater-Nichols Act. The Act, viewed by many as the solution to the many roadblocks to

jointness is merely the beginning of the process. As the Report of the Commission on Roles and Missions points out:

The Department has strengthened its capabilities for unified operations considerably since passage of the 1986 Goldwater-Nichols Defense Reorganization Act. But, that job is not yet done; further efforts to ensure the effectiveness of joint operations are essential to a successful and secure future.⁶⁸

However, it should be noted that the Goldwater-Nichols Act is the first successful implementation of the concept of jointness during peacetime in modern American military history. Concerns about the effects of extended separation of officers from their parent services to earn joint subspecialty designation must also be considered.

The CORM report is right in its assertion that further enhancements to effective joint military operations will come through expanded support of the CINCs. Greater control of the budgetary aspects of the unified combatant commands must be placed in their hands. The Commission recommendations have been largely implemented, but care must be taken to ensure the individual service identities and core competencies are not lost in a headlong rush towards jointness.

Mission consolidation will continue due to constrained budget resources. With it comes the competition for control of those missions. The acrimony of this competition may also detract from the goal of seamless interoperability and cooperation between the services. As described in the historical accounts of jointness, failures in combined operations occurred when interservice friction surfaced between military leadership, not at the operational level. What is

⁶⁸ U.S. Commission on the Roles and Missions of the Armed Forces, p. ES-1.

necessary is a top-down commitment within each service and the Defense Department as a whole to serve the needs of the nation as well as the needs of each service.

IV. CASE STUDY: U.S. NAVY EA-6B "JOINT-SERVICE EXPEDITIONARY SQUADRONS" AND THE CONSOLIDATION OF THE TACTICAL AIRBORNE ELECTRONIC WARFARE MISSION

One of the most significant mission consolidation decisions made in the post-Cold War Department of Defense was to merge tactical airborne electronic warfare under the Navy using the EA-6B *Prowler* electronic attack aircraft. This was unique in that previous consolidations had involved mainly training and support functions. For the first time in modern military history, a tactical mission is to be manned and fought by members of two separate services in the same unit—a textbook case of jointness. With budget dollars dwindling, in the areas of modernization and procurement, the Department of Defense was faced with finding ways to cut expenses without severely degrading readiness and core capabilities. The result was the decision to retire two aircraft from the Air Force inventory, the EF-111 *Raven* and the F-4G *Wild Weasel*, to transfer their mission to the Navy, and to concentrate future spending and program enhancements on a single aircraft, the EA-6B *Prowler*. This decision has produced both praise and criticism. Those in favor see this change as a herald for joint operations of the future and as a positive means of funding the electronic combat mission at reduced cost without a significant reduction in America's warfighting capacity. Critics predict readiness shortfalls and cite ulterior motivation to eliminate older "sunset" equipment and missions in favor of budget rich "sunrise" systems rather than joint interoperability as the rationale for reducing the Air Force role in electronic warfare.

This case study will cover the consolidation process in detail, divided into five areas. First, a brief history and background of the electronic combat mission of the *Prowler* and *Raven* aircraft, the decision to consolidate the mission under one service/platform, and the arguments for using the EA-6B instead of the EF-111 as the sole mission provider will be presented. Section B will cover the consolidation process from consideration of the earliest options to the present plan of action and accompanying milestones. Section C will address the final Memorandum of Agreement (MOA) between the services and the Joint Staff and how it addresses joint issues, while (D), the following section, assesses developments in the consolidation since the MOA was promulgated. Section E will summarize the case study and offer concluding remarks.

A. HISTORY AND BACKGROUND

Although electronic warfare has been part of military aviation since the waning days of World War II, funding and resources directed towards filling this need were at first relatively small. The lack of funding inevitably impacted the mission of airborne electronic warfare in both qualitative and quantitative terms. Through the 1950s and early 1960s, the number and capabilities of aircraft dedicated to combat in the rapidly expanding radar environment were minimal. For a considerable period of time, modern equipment was scarce, funding was difficult to secure and, as a consequence, the few electronic combat units that did exist had to struggle with aircraft and hardware that

was old and near-obsolescence. This lack of equipment and expertise was unfortunate during peacetime; however during war, it became fatal. With U.S. aircraft and aircrew suffering heavy losses in Vietnam to surface-to-air missiles and radar guided anti-aircraft artillery, the need to develop aircraft, weapons and tactics to defeat these weapons became of paramount importance. Unfortunately, with the ever-increasing capabilities of radar systems, it took a considerable amount of time to develop and field electronic warfare systems that could adequately handle the threat. Rapidly implemented modification programs did, however, result in some improvement. Navy vintage Douglas EA-1F *Skyraiders* were replaced by the Douglas EKA-3B *Skywarrior* while the Air Force modified a similar variant, the B-66 *Destroyer*, into the EB-66 with fairly positive results. Thus, with the dedication of tactical aircraft to warfare in the electromagnetic realm, the mission of Suppression of Enemy Air Defenses (SEAD) was born.¹

It was the Navy which first upgraded its electronic warfare capability, deploying the first models of the Grumman EA-6B *Prowler* in the summer of 1972, shortly before the end of the Vietnam War. The Air Force was forced to wait for almost another decade before it began to take delivery of a long-overdue EB-66 replacement. Therefore, a gap of several years between the retirement of the aging EB-66 and the induction of the General Dynamics/Grumman EF-111A *Raven* severely limited Air Force warfighting capabilities on the "electronic battlefield." Both the EA-6B and EF-111 have

¹ Streetly, Martin, Airborne Electronic Warfare: History, Techniques and Tactics, London, Janes Publishing, 1988, pp. 34-65.

served with distinction, culminating in their significant contribution to the overwhelming success in the air war during Operation Desert Storm. In light of their superb performance and role in protecting strike aircraft from airborne as well as surface launched threats, rules of engagement in subsequent “No-Fly” zones prohibit aircraft from entering threat environments without an electronic combat aircraft escort. Unfortunately, neither EA-6Bs nor EF-111s were airborne when Air Force Captain Scott O’Grady’s F-16 Falcon was shot down in Bosnia.²

1. The Grumman EA-6B *Prowler*

The roots of the *Prowler* can be traced back to the A-6 *Intruder*, a two-seat all weather attack aircraft that entered service in the early 1960s and is just now being phased out of the Navy inventory. However, except for the very earliest versions of the aircraft, the *Prowler* was built from the “ground up” as an electronic attack aircraft. The first EA-6Bs entered the fleet in 1971 with the establishment of VAQ-129 and VAQ-132.³ The former designated as the Fleet Replacement Squadron (FRS) for training new aircrew and the latter as the first operational squadron which eventually saw combat in the waning days of Vietnam. By 1990, there were 14 carrier-based and two reserve Navy *Prowler* squadrons, while the Marine Corps operated one reserve and one large active squadron. Each fleet squadron was composed of 4 to 5 aircraft

² “GAO, DOD at Odds Over Support for SEAD Mission,” *Aerospace Daily*, 178:10, April 12, 1996, p. 73.

³ “VAQ” is the unit type identifier for a Tactical Electronic Warfare Squadron. The “V” stands for aviation, “A” for attack and the “Q” for electronic.

depending on the needs of the air wing and its operational demands. All of the Navy squadrons, except one forward deployed to Japan, are now located at Naval Air Station Whidbey Island. The Marines deployed detachments out of their large squadron, VMAQ-2, from Cherry Point Marine Corps Air Station until 1993, when the reserve squadron was activated and VMAQ-2 was divided into three separate squadrons.

The EA-6B is a twin engine, four seat, all-weather electronic attack jet that is manned by a pilot and three Electronic Countermeasures Officers (ECMOs). The heart of the *Prowler* mission system is the ALQ-99F Tactical Jamming System which allows ECMOs to analyze, record, target and jam enemy ground and airborne radars through ram-air turbine powered jammer pods carried on four wing stations and one fuselage centerline station. Each pod carries two jamming transmitters, each of which is dedicated to a certain radio frequency bandwidth. Transmitters can be removed and replaced within the pods, enabling the *Prowler* to carry up to ten transmitters with various jamming capabilities which allows the aircraft to be tailored to meet the electromagnetic environment. Additionally, the *Prowler* has been upgraded to carry the AGM-88 High Speed Anti-radiation Missile (HARM). With the retirement of the F-4G *Wild Weasel*, the *Prowler* has become the premiere platform for employment of the unique, radar-seeking HARM. The *Prowler* is a sub-sonic, non-after-burning jet aircraft with top speeds of approximately 565 knots and cruising speeds of 420 knots. The service ceiling is 38,000 feet, though it is normally operated at flight levels between 25,000 and 30,000 feet. The last major system upgrade was the Improved Capability II (ICAP II) in

the mid-1980s with occasional software upgrades since. Currently, the fleet is receiving safety of flight and navigational system upgrades dubbed Block 89A. In light of the mission consolidation, a major mission system upgrade, ICAP III, has received preliminary funding from Congress in the fiscal year 1997 Defense Authorization. The *Prowler* is also being upgraded to carry a tactical communications jammer, the USQ-113, to further enhance its effectiveness.⁴

2. The General Dynamics/Grumman EF-111A *Raven*

Unlike the *Prowler*, all EF-111s are modified F-111 *Aardvark*, supersonic bombers upgraded by Grumman Aerospace to employ the ALQ-99E Tactical Jamming System. The Air Force *Raven* began service in late 1981 resulting in a total inventory of 42 aircraft. Two squadrons of EF-111s were established. The first and largest squadron, the 390th Electronic Combat Squadron (ECS), was based at Mountain Home Air Force Base in Idaho, and the second squadron, the 42nd ECS based at Royal Air Force Base Upper Heyford, England. After Desert Storm, the squadrons were consolidated into the 429th Electronic Combat Squadron and based at Cannon Air Force Base, New Mexico with the remaining F-111s. There are currently 12 *Ravens* in the inventory, scheduled for retirement in fiscal year 1998. The Air Force maintains rotating detachments of EF-111s at bases in Incirlik, Turkey and Dhahran, Saudi Arabia to support ongoing operations in no-fly zones in

⁴ Gunston, Bill, An Illustrated Guide to Spy Planes and Electronic Warfare Aircraft, New York, Prentice Hall, 1988, pp. 80-89.

northern and southern Iraq. *Ravens* are also in service in Operation Joint Endeavor in the Balkans.⁵

The EF-111 is similar to the *Prowler* in that it uses the ALQ-99 Tactical Jamming System. Like the *Prowler*, its sensors are located in the characteristic tail pod known as the "football." The *Raven* differs from the *Prowler* in that it carries all ten of its jamming transmitters internally in a 16 foot long canoe-shaped ventral fairing. Additionally, the *Raven* is a two-seat aircraft manned by a pilot and Electronic Warfare Officer (EWO) seated to his right. The system relies on a higher scale of automation via its AYK-14 tactical computer to decrease the substantial workload involved in electronic surveillance and countermeasures. Also, the *Raven* is not capable of employing the HARM missile unlike its Navy counterpart. The EF-111 is a super-sonic aircraft with top speeds in excess of 1200 knots and a cruising speed of 430 knots. The service ceiling is 45,000 feet, though like the *Prowler*, it tends to operate at lower altitudes.⁶ The *Raven* mission system has received four block upgrades since its inception. A scheduled System Improvement Program (SIP) first funded and subsequently cut in 1988 was canceled again in 1995 when the decision to retire the platform in favor of the EA-6B was made.⁷

⁵ Interview with Ronald Rivard, Lt Col, USAF, Joint Operations Staff, COMVAQWINGPAC, NAS Whidbey Island, WA, 26 March 1996.

⁶ Gunston.

⁷ Knowles, John and Zachary Lum, "Into the Readiness Gap," *Journal of Electronic Defense*, 19:3, March, 1996, pp. 46-51.

3. The Decision to Consolidate the Electronic Warfare Mission

Consolidation of the Tactical Airborne Electronic Warfare Mission is not a new concept. Proponents of using the EA-6B as the Defense Department's primary electronic combat aircraft can be found as early as 1982 when the *Raven* was just entering service.⁸ These voices were quieted with the enormous defense build-up by the Reagan administration. There simply weren't enough of either aircraft to meet deployment commitments and adequate funding was available to maintain both platforms and their infrastructure. However, the collapse of the Warsaw Pact and the end of the Cold War led to enormous cutbacks in defense spending as lawmakers sought the fruits of the so-called "Peace Dividend." With funding becoming increasingly scarce and the costs of upgrading both fleets measured in the billions of dollars, the decision to find cost savings in consolidation found renewed support. In his famous July, 1992 Senate floor speech, Senator Sam Nunn called for the elimination of unnecessary duplication of capabilities and a move towards joint interoperability. He specifically cited alleged redundancies in electronic combat aircraft and charged Chairman of the Joint Chiefs of Staff Colin Powell to find and eliminate these redundancies during his review of the roles and missions of the armed forces.⁹ Interestingly, the Senate failed in attempting to begin the consolidation process prior to receiving General Powell's report by, "...eliminating further EF-111 upgrades and concentrating all funds in the EA-

⁸ Miller, Gerald E., "The Promises and Pitfalls of USAF-Navy Cooperation," *Air Force Magazine*, 65:11, November, 1982, p. 73.

⁹ Nunn, p. S9562.

6B [program]" when formulating the fiscal year 1993 Defense Authorization.¹⁰ When the Chairman delivered his findings in February, 1993, he specifically recommended retaining both aircraft, citing complementary not duplicative capabilities that significantly benefit the Defense Department.¹¹

When the congressionally-mandated Commission on Roles and Missions of the Armed Forces delivered their recommendations over two years later, the alleged redundancy in tactical electronic warfare was re-analyzed. This time, the recommendation was for increasing funding for the *Prowler* and retirement of the EF-111. This time, Pentagon and service officials had preemptively decided on a course of action months before the CORM submitted its findings. As early as November, 1994 indications that the EF-111 was headed for the "chopping block" led to Program Budget Decisions (PBD) 752 and 753 in December 1994. PBD 752 increased funding and manning appropriations for the *Prowler* beginning in fiscal year 1996 by \$656 million while PBD 753 cut funding for the *Raven* by \$1.482 billion through the end of fiscal year 1997, respectively.¹² Though no official direction was provided until September, 1995, the shifting of funds combined with the decision by top Air Force officials to retire the EF-111 left little doubt that the *Prowler* was intended to be the sole

¹⁰ Boatman, John, "Tougher Line on Joint Projects," *Janes Defence Weekly*, 18:16, October 17, 1992, p. 7.

¹¹ Powell, Report on the Roles, Missions, and Functions of the Armed Forces of the United States.

¹² See: Program Budget Decisions 752 and 753. Additionally, a November 1994 report from the Operations Staff to the Commander, Electronic Combat Wing Pacific outlined concerns that required consideration if the EA-6B community was destined to assume the electronic combat mission for the Air Force.

source of Joint Suppression of Enemy Air Defenses (JSEAD) support into the 21st century.¹³

4. Choosing the EA-6B over the EF-111A

The decision to retire the *Raven* in favor of the *Prowler* was made according to many variables including fiscal considerations, operational capabilities, availability and survivability. The EA-6B was the best platform in nearly every area. Several capabilities and advantages were traded-off in the selection of the *Prowler*. Of primary concern was that the platform be equally suited for both land-based and carrier-based operations. This meant that the *Prowler* would be the aircraft of choice since the *Raven* is not carrier capable (ironically, the F-111 was originally intended for shipboard use, but was too large to operate in the carrier environment). However, other attributes of the *Prowler* were also key in the decision to retire the EF-111.

With the F-4G *Wild Weasel* also slated for deactivation, the Air Force was forced to rush into integrating the HARM Targeting System (HTS) on the F-16 as a replacement. Unfortunately, the HTS-equipped *Falcon* is not an equal substitution for the SEAD capabilities lost in retiring the *Wild Weasel*.¹⁴ The superior HARM employment capability is a much closer replacement. Also, the *Prowler* is capable of communications jamming, which the *Raven* is not configured to perform. For survivability considerations, the *Raven* carries only two aircrew while the *Prowler* carries four. This leads to greatly enhanced

¹³ Interview with Kenneth Scruggs, LCDR, USN, Joint Operations Manning Requirements, COMVAQWINGPAC, NAS Whidbey Island, WA, 12 August 1996.

¹⁴ Knowles and Lum, p. 50.

situational awareness, division of labor and response time for the EA-6B.¹⁵ All of these are critical in the dynamic realm of electronic combat.

With a rapidly expanding surface-to-air threat environment and the proliferation of third and fourth generation anti-aircraft missile systems, both the *Raven* and *Prowler* were in dire need of extensive system upgrades, the costs of which for both were well over \$1 billion. The upgrades proposed for the *Prowler* were actually more extensive. However, these upgrades would be considerably more effective in bringing the EA-6B to the level required to meet emerging threats. Additionally, there were 127 EA-6B aircraft in the inventory as opposed to a total of 40 *Ravens* in the Air Force inventory.¹⁶ Training considerations showed that while the *Raven* pilots were trained at the F-111 training squadron, training for EWOs in the art of employing the *Raven* system was done by the operational squadrons. Conversely, the *Prowler* community had VAQ-129, the designated Fleet Replacement Squadron with more than 15 dedicated aircraft for the express purpose of training pilots and ECMOs for the fleet. Fiscally, the *Prowler* is a cheaper aircraft to operate. The Flight Hour Program cost for the *Prowler* in 1996 is approximately \$3,255 per flight hour while the cost per flight hour for the *Raven* is approximately \$5,500.¹⁷

¹⁵ Electronic Warfare Associates, "Joint Prowler Program," *Draft Brief* dated March 6, 1995.

¹⁶ Ibid.

¹⁷ Force Comptroller, COMNAVAIRPAC, "Official Flying Hour Cost Report: June 1996," August 9, 1996, Activity Group 1A, TACAIR/EA-6B. and Electronic Warfare Associates, *Draft Brief*.

Arguments that questioned *Prowler* ability to fill the gap that would be created by *Raven* retirement centered around performance differences between the two aircraft and tactical considerations in the different ways the services employed their airborne jamming assets. The *Prowler*, as previously mentioned, is not capable of super-sonic flight, and many tacticians worried that the concept of “fast strike” would be jeopardized. Some Air Force plans and tactics require super-sonic runs deep into the battle arena followed by super-sonic exits from the threat environment. The differences in service ceilings, range and endurance were also questioned as the *Raven* has slightly greater capacity in each of these areas. Finally, Air Force tactics are different than Navy SEAD tactics, with different profiles flown by the two jammers. This was more of a parochial concern as training to new tactics was never considered to be a “show stopper.” Nevertheless, each of these areas was scrutinized and evaluated before the decision to retire the EF-111 was made.

B. THE PROCESS OF CONSOLIDATION

The decision to consolidate the electronic warfare mission officially began in late 1994 with the issuance of Program Budget Decisions 752 and 753 by the Office of the Secretary of Defense. Since then, two Joint-Service Expeditionary Squadrons have been established and the first of these squadrons, the VAQ-134 “Garrudas,” has been deployed to Marine Corps Air Station (MCAS) Iwakuni in southern Honshu, Japan. This milestone occurred well ahead of the timeline originally developed. However, the process of

consolidation was not simple. Several Concept of Operations (CONOPS) meetings were held and many options were considered before the final Memorandum of Agreement was distributed in March 1996. The plan is still in flux, with concerns about adequate funding, deployment schedules and the ability of the Navy to provide the support required by the Air Force still under debate.

1. Initial Planning, Options and Concerns

In January 1995, a Concept of Operations meeting was arranged by the Current Operations Staff of the Joint Chiefs of Staff Operations Directorate (J33). This meeting was held on January 25 and 26, 1995 at Naval Air Station Whidbey Island and included representatives from each CINC staff, the Joint Command and Control Warfare Center (JC²WC), the Navy, Air Force, Marine Corps and various representatives from the Navy and Air Force electronic attack community. The purpose of the meeting was to provide an orientation on the EA-6B, joint CONOPS development, and to receive input from each CINC regarding electronic warfare requirements in both peacetime and war.¹⁸ The main objective of this initial meeting was to identify CINC and Joint Staff requirements. This would allow the Navy and Air Force to begin planning for the final configurations of the joint squadrons and the multitude of transition requirements as the EF-111 retired and the EA-6B operational inventory was

¹⁸ Message from Joint Staff dated January 14, 1995.

increased.¹⁹ The meeting was viewed as successful with everyone involved from the Joint Staff to the CINCs and individual services agreeing on, "...a baseline understanding of capability differences and, in some cases, a reluctant realization that we will have to make this program work and work efficiently with 16 operational EA-6B's (plus 4 more for [FRS] training)."²⁰ Immediate recommendations were to increase the Navy Primary Aircraft Inventory (PAI) of EA-6Bs by 20 aircraft and halt the decommissioning of VAQ-134 as part of the drawdown for its rebirth as the first joint-service squadron. Initial plans were to have the Garrudas in deployable status by mid-1996 to cover the EF-111 force reduction, and ready the squadron for deployment in fiscal year 1997.²¹ The increase in the EA-6B PAI allowed for 16 aircraft for use by four joint squadrons and 4 additional aircraft to support the increased training requirements at VAQ-129.

Early in February 1995, using the budget authority shifts approved by PBD 752 (no official direction had been received), the Chief of Naval Operations' Aviation Manpower and Training Branch (N889) reestablished the manning requirements for VAQ-134 and prepared to recommission the VAQ-133 "Wizards" during fiscal year 1996. The "Wizards" were one of the first EA-6B squadrons decommissioned as part of the defense drawdown in 1991.

¹⁹ Memo from Kenneth Kretch, CDR, USN, COMVAQWINGPAC Staff to Al Miller, CDR, USN, N88OC3 (EA-6B Requirements Officer, Office of the Chief of Naval Operations), dated January 18, 1995.

²⁰ Message from Roger A. Pierce, CAPT, USN, COMVAQWINGPAC, to Robert J. Spane, VADM, USN, COMNAVAIRPAC, dated January 27, 1995.

²¹ Ibid.

Additionally, plans were made to "stand up" the final two joint squadrons, the VAQ-137 "Rooks" and the VAQ-142 "Grim Watchdogs," in fiscal year 1997. With the increase in operational squadrons and the joint nature of the new squadrons, manning at training facilities and maintenance activities at NAS Whidbey Island were also programmed for expansion. Additionally, an Air Force liaison was requested from USAF to assist in the smooth transition to "Purple Prowlers."²²

On February 28, 1995, a meeting was held at the headquarters of the Commander, Naval Air Forces Pacific Fleet (COMNAVAIRPAC), "...to establish a baseline for efforts required to identify supportability issues..."²³ The minutes of this meeting highlighted two options for joint squadron composition. The overall plan was to establish four joint-service *Prowler* squadrons that would be deployed to air bases in Incirlik, Turkey and Dhahran, Saudi Arabia and other sites as requested by regional CINCs. The first option was for six aircraft per squadron that could be split into two detachments for dual site manning, and the second option was for four aircraft per squadron with a two aircraft "plus up" for deployments that would still meet the two detachment plan of option one.²⁴ Major concerns addressed at this meeting included readiness, flight hour funding, and shore basing requirements.

²² Memo from R. Buncher to COMNAVAIRPAC EA-6B Requirements Office dated February 3, 1995.

²³ Memo from Butler Smythe, LCDR, USN, COMNAVAIRPAC Staff to COMVAQWINGPAC Readiness Office, dated March 2, 1995.

²⁴ Ibid.

Maintenance issues revolved around funding for Standard Depot Level Maintenance (SDLM) of aircraft and Intermediate level Maintenance Activity “vans” since the Air Force had recently transitioned to only two levels of maintenance (operational and depot levels). Additionally, supply and logistics concerns such as support equipment, Aviation Consolidated Allowance List (AVCAL) spares, and Individual Material Readiness List (IMRL) tools were also identified.

From March 27 through 29, 1996, another joint CONOPS meeting was held by J33 at the Naval Doctrine Command and U.S. Atlantic Command to address these issues. Joint Staff goals also included production of a timetable and concept of operations for the completion of transition of all JSEAD responsibility to the Navy and the publication of a draft Memorandum of Agreement between the Air Force, Navy and Marine Corps to support the plan.²⁵ The briefings began with an overview of the Office of the Secretary of Defense vision for the future of electronic warfare by the Joint Staff, noting that no official direction on how the consolidation of the JSEAD mission was to be accomplished.²⁶ The CINC representatives highlighted their concerns for providing the required electronic attack support to units in the areas of responsibility while the Marine Corps briefed specific concerns of the Army and Marines regarding electronic attack support on the “digitized battlefield.” The

²⁵ Message from Joint Staff dated March 13, 1995.

²⁶ Secretary of Defense William Perry’s “Annual Report to the President and Congress,” dated February 1995, did point out that the Navy EA-6B would assume the Air Force EF-111 mission, p. 208.

Air Combat Command voiced concerns that the consolidation would limit their ability to provide electronic warfare support to their forces and suggested to options to lessen the impact. The first option was to “nationalize” the EA-6B and the second was to transfer a number of *Prowlers* to the Air Force instead of establishing joint squadrons managed by the Navy. After these briefings, attendees were divided into four working groups that discussed: (1) CINC requirements (peacetime/major regional conflict or MRC/contingency operations), (2) logistics and training issues, (3) EA-6B warfighting upgrades and (4) EA-6B/USAF mission integration and planning systems.²⁷ Each of these working groups identified possible solutions and alternatives to the problems discussed. The Logistics and Training working group’s findings indicated that the most cost effective and timely results could be found through the continuation of the joint-service plan.²⁸

By the end of the conference, a draft Memorandum of Agreement between the Air Force and Navy laid down the ground work for the establishment of, “[f]our land-based carrier-capable EA-6B squadrons of at least six aircraft each, fully trained and continuously available for tasking...”²⁹ The squadrons were to be located at NAS Whidbey Island to make efficient use of the existing support and training infrastructure, and the squadrons would be manned by a combination of Air Force and Navy aircrew but, would be

²⁷ “Hot Wash Up: Joint EA-6B CONOPS Meeting,” dated March 27-28, 1995.

²⁸ Ibid.

²⁹ “USN/USAF Memorandum of Agreement on Consolidation of Airborne Electronic Attack Mission,” *Draft*, dated March 30, 1995.

maintained by Navy personnel. Training for all personnel would remain under the purview of the Navy. The agreement required that the squadrons would be land-based and supported as such. The MOA also left planning, programming and budgeting for the squadrons and necessary upgrades to the discretion of the Navy.³⁰ The agreement also outlined areas of agreement and points of disagreement that were still left to be answered. Both services agreed that the ability to prosecute two nearly simultaneous MRCs would be questionable, but the goal was to meet the CINC requirements. Funding levels in areas such as IMA "vans", AVCAL/spares, training and mission planning systems were also agreed upon. The major points of disagreement centered around whether the *Prowler* should be "nationalized," if the squadrons should be carrier-qualified and short and long term "mission area" funding issues.³¹ Because of considerable dissension over the language and scope of the MOA, it was not adopted. The Air Force followed through with plans to determine the feasibility of organically operating and maintaining a force of EA-6Bs and which base (NAS Whidbey Island, MCAS Cherry Point, or Cannon AFB) should serve as their home.³²

2. Squadron Composition, "Ownership" and Basing Issues

A feasibility study and site survey conducted by the Air Force in June 1995, reported, "...that while it would be possible for the Air Force to own and

³⁰ Ibid.

³¹ Ibid.

³² Headquarters, U.S. Air Force message 211959ZAPR95, Subject: EA-6B Feasibility Assessment and Site Visits, April 21, 1995.

operate the EA-6B, the absence of compelling warfighting advantages and the presence of significant ops and logistics complications make integration of this weapon system into the USAF undesirable.”³³ The report also recommended that NAS Whidbey Island serve as the home base for the joint squadrons.

In recommending against USAF ownership of EA-6Bs, the survey team cited Navy corporate knowledge as advantageous to re-configuring “mothballed” *Prowlers* to meet the expanded PAI as well as significant maintenance and technical data resource differences between the two services as potential stumbling blocks. Overcoming these issues, “...would involve a significant amount of retraining...and an extensive level of time and effort.”³⁴ The report cited past difficulties in this area when the Air Force acquired HH-60 *Blackhawk* helicopters from the Army. Additionally, the Tactical EA-6B Mission Planning System (TEAMS) that provides complete mission and aircraft planning data for the ALQ-99 system is not compatible with the Air Force Mission Support System (AFMSS) or Combat Intelligence System (CIS) and a minimum investment of \$10 million and two years would be required to assimilate. Finally, supply support for the aircraft would have to be conducted manually between the Air Force and Navy since the supply systems of each service are different. After careful consideration of these and other manpower and personnel training issues, the survey team concluded:

³³ Message from John W. Gillis, Lt Col, USAF, Air Combat Command CINC and Congressional Support Staff to Headquarters, U.S. Air Force, dated June 7, 1995, p. 2.

³⁴ Ibid., p. 4.

USAF ownership would allow more direct control of training/integration and maintain USAF expertise in the support jamming role. However, these objectives can also be achieved through a robust joint training program and an increased USAF aircrew presence in the Navy EA-6B program. Given the cost and complexity associated with setting up this unique unit, as well as the absence of net value added, [we] believe the best course of action is to allow the Department of the Navy, well experienced in operating the EA-6B, to continue to do so.³⁵

The decision to maintain the squadrons at NAS Whidbey Island was equally well-thought-out. Six areas of concern were analyzed and given the following priority: (1) Operations, (2) Housing, (3) Mission Facilities, (4) Manpower and Organization, (5) Supply, and (6) Intermediate Level Support. There were four main issues addressed in evaluating each site for operations. Single-engine performance was an issue at Cannon AFB since its elevation of 4,295 feet above sea level combined with temperatures greater than 90 degrees fahrenheit exceeded conditions for safe single-engine rates of climb if an engine were to fail on takeoff. Neither Whidbey Island nor Cherry Point exceeded these safety of flight issues. The next factors considered under operations was the availability of electronic warfare, ground controlled intercept and acquisition radar training and flight simulator facilities. Whidbey Island has the 15E34 "Dolly" electronic combat simulation system specifically designed for airborne electronic warfare training as well as excess capacity in both its "front seat" flight simulators and "back seat" system training simulator. Cherry Point had available airborne and flight training facilities, however there was little excess capacity built into the current contracts. Cannon did not have simulators and would require installation of facilities at

³⁵ *Ibid.*, p. 7.

great expense or significant temporary assigned duty (TAD) funding to send aircrews to Whidbey Island for requisite training. The final operational factor considered was training airspace availability. Whidbey Island aircraft had access to four large operating airspaces and the commercial air traffic congestion was minimal. Cherry Point was at a disadvantage due mainly to its proximity to major commercial air traffic control centers on the eastern seaboard.

The second area of concern was housing. Both Cherry Point and Cannon had sufficient military and civilian housing to accommodate the new squadrons while Whidbey would require \$15 million in additional military construction budget authority to construct additional housing. The waiting period for housing at Whidbey Island was between four and 14 months. However, locating at Whidbey Island would negate the long-term need for TAD billeting during training evolutions.

The third area analyzed was the availability of mission facilities. None of the bases had sufficient facilities to support the additional squadrons. However, significant cost differences, estimated in fiscal year 1997 dollars, existed. New construction and improvements at Cherry Point were estimated at \$11 million as compared to only \$4 million at both Cannon and Whidbey Island. Whidbey Island was considered more advantageous in light of the already mentioned costs and difficulties in manpower, logistics, and training faced with locating at Cannon.

The next area, Manpower and Organization, was not as favorable at Whidbey Island. Cannon was the first choice since it was an Air Force base

and already configured, manned and organized for USAF control. Cherry Point, although a naval installation, was in the U.S. Atlantic Command's (USACOM) AOR as was the Air Combat Command. This would greatly ease coordination and communications between the two organizations. Whidbey Island was the least favorable option, since it was a Navy installation and fell under the responsibility of the U.S. Pacific Command (USPACOM).

As previously mentioned, the area of Supply would be easier if the squadrons were located at a naval installation. In this area, both Whidbey Island and Cherry Point were "tied" since they used the same supply system and coordinated through COMVAQWINGPAC for supply support. Cannon would have been faced with extended lead and turn around times since all supply support would have to be handled manually.

The final area of concern, Intermediate Level Maintenance support, was overwhelmingly in favor of Whidbey Island. Although Whidbey Island needed additional manpower to increase the Aviation Intermediate Maintenance Department's (AIMD) capacity, the site was permanent, supplying personnel as necessary for SEAOPDET requirements for deployed units. Cherry Point also had intermediate level support, but these units deployed with the Marine squadrons and a much larger increase in personnel and maintenance "vans" would be required. Since the Air Force had transitioned to two levels of maintenance and the availability of EA-6B spare parts would not support that concept, intermediate level support would have to be supplied from Whidbey Island anyway.

In summary, the site survey team recommended basing the joint squadron aircraft at NAS Whidbey Island, stating that:

Whidbey Island offers the best facilities and training environment to stand up the [joint-service squadrons]. It would also require only one move for training and unit assignment. Aircraft expertise is readily available and the...supply pipeline would be as short as possible. [We] believe these advantages outweigh the housing shortage and USPACOM coordination differences. The single engine performance limitations at Cannon would add risk to summer operations. Cherry Point has the housing and aircraft expertise, but would further congest East coast airspace.³⁶

3. The General Officer Steering Group (GOSG): Analysis and Results

On June 21, 1995, a General Officer Steering Group headed by Rear Admiral Francis W. Lacroix, presented their recommendations from their "EA-6B Consolidation Study" as directed by the Office of the Secretary of Defense in February 1995.³⁷ The brief provided background and insights into CINC requirements for Operations Other Than War (OOTW). The GOSG main question for analysis was how to cover the CINC requirements with adequate electronic attack assets with PERSTEMPO being the overriding factor.³⁸ Based on a 2:1 PERSTEMPO for the existing nine Carrier Air Wing (CVW) dedicated Navy squadrons, one Navy reserve EA-6B squadron and 4 Marine

³⁶ *Ibid.*, p. 11.

³⁷ Lacroix, Francis W., RADM, USN, and the General Officer Steering Group, "EA-6B Consolidation Study," *Draft Brief*, dated June 21, 1995.

³⁸ PERSTEMPO is the ratio at which personnel are "at home" vs deployed. For example, a PERSTEMPO of 2:1 implies that for every 6 months a unit is deployed, they are supposed to remain in port for 12 months. This does not preclude the unit from participating in short exercises and detachments away from home base in a temporarily assigned duty status. Navy policy strictly enforces the 2:1 rule for extended deployments.

Corps *Prowler* squadrons for deployment to MCAS Iwakuni, three squadrons were required to maintain 1 continuously deployed. Using this calculation, the GOSG determined that to cover three forward deployed sites (Iwakuni plus two USAF support sites) would require 19 squadrons. With only the fourteen squadrons in existence, the GOSG determined that an actual requirement for five joint-service squadrons would be necessary.³⁹ With four aircraft per CVW squadron and five aircraft per Marine squadron, the Primary Aircraft Inventory for EA-6Bs stood at 60 *Prowlers*.⁴⁰ The addition of five joint-service squadrons with 4 aircraft each raised the new PAI to 80 aircraft. Additionally, 25 percent of PAI determines the number of aircraft required for training (VAQ-129), therefore the FRS fleet would be expanded to 20 aircraft. Also, the Operational Test and Evaluation Force (OPTEVFOR) squadron, VX-9, maintains four aircraft for test purposes. This culminated in a new *Prowler* fleet PAI of 104 EA-6Bs. Estimating 16 percent of the EA-6B inventory as undergoing Standard Depot Level Maintenance at a given period equated to a SDLM requirement of 17 aircraft. Therefore, the GOSG determined that Total Aircraft Inventory for the assumption of the JSEAD mission would be 121 EA-6Bs. With an Full Aircraft Inventory of 127 EA-6Bs, the Steering Group concluded that sufficient aircraft were available to assume the mission and accommodate six years of attrition.⁴¹

³⁹ GOSG, p. 13.

⁴⁰ Perry, "Annual Report," 1995, p. 208.

⁴¹ GOSG, p. 16.

The concept of operations outlined by the General Officer Steering Group required that the *Prowler* fleet be: (1) MRC responsive, (2) the entire EA-6B fleet would be owned and operated by the Department of the Navy, (3) one squadron would be assigned to each deployable air wing, (4) MCAS Iwakuni would be continuously manned by rotating squadrons of Marine Corps *Prowlers*, (5) the fleet would have the capability to deploy a minimum of 2 land-based EA-6B squadrons simultaneously for OOTW, and (6) land-based operations would be logistically sustainable with both operational-level and intermediate level support available. To ensure that the budget authority would be available to support this concept of operations, the GOSG established a baseline Program Objective Memorandum (POM) with two other options. The baseline POM included the budget "plus-up" provided for in PBD 752 which allowed for 15 Block 89A upgrades as well as adequate personnel and Navy Operations and Maintenance (O&M/N) funding. What PBD 752 did not provide budget authority for was the depot maintenance funding required to activate 24 "mothballed" EA-6Bs or the funds for purchasing shore support requirements. Shore support requirements included deployable intermediate level maintenance "vans", spare parts or mission planning equipment. This baseline resulted in an "inventory bathtub" (i.e. shortfall) because of a depot maintenance funding shortfall in fiscal years 1996 and 1997 of \$38 million for the 24 inactive *Prowlers*.

A second option presented combined the Navy POM (including PBD 752) and an Air Force POM for \$152 million that provided funding for electronic warfare assets in fiscal years 1997, 1998 and 1999. This option would mitigate

the afore-mentioned “inventory bathtub” by providing the \$152 million in funding which would cover the depot maintenance for the 24 EA-6Bs, fund intermediate level “vans”, and maintain a 12 aircraft EF-111 inventory through fiscal year 1999. This option did not provide for depot maintenance and “vans” beyond 1999 that was estimated to be \$105 million. It also extended the EF-111 in the Air Force inventory at least two years beyond its scheduled retirement in fiscal year 1997.

The third option, dubbed the “Accelerated Department of the Navy Program Objective Memorandum,” included the \$656 million provided for in PBD 752 plus accelerated funding plan for \$105 million in fiscal years 1996 and 1997. The new total of \$761 million reduced the inventory shortfall to four aircraft in fiscal year 1997 and provided shore sustainability for fiscal years 1996 and 1997. Additionally, the accelerated POM option provided for full Joint mission capability by January 1998, met the *Raven* retirement goal of April 1997, and ensured that the first Joint-Service Expeditionary Squadron, VAQ-134, would be ready for operations by April 1996.⁴²

The brief then addressed the three overarching goals required by the Air Force participants. The first goal was that the EA-6B would be able to fill all Joint requirements. The GOSG asserted that the Accelerated Navy POM option would ensure that this goal was met. The next target was that the plan would provide for an adequate number of electronic warfare assets through the transition period of consolidation. Once again, the GOSG determined that this end would be best served by the Accelerated POM option. Finally, the Air Force

⁴² *Ibid.*, pp. 22-23.

stated that they wanted adequate peace-time access to the EA-6Bs for training purposes and exercises. The Steering Group recommended that a Memorandum of Understanding between the Air Force, Navy and Marine Corps be promulgated to ensure that the Air Force would not be left out when assets were required to meet commitments other than contingency operations.

The next issue addressed by the Steering Group was the requisite upgrades to the EA-6B to maintain its value as a force multiplier. Priorities for various upgrades were based on four studies in the areas of *Prowler* specific electronic warfare. The funding analysis assumed that all 127 TAI EA-6Bs would be upgraded. The four studies were the EA-6B Operational Assessment Group (OAG) priority list, which is a compilation of needs identified by the members of the EA-6B community, a draft report of the Joint Tactical Airborne Electronic Warfare Study (JTAEWS) EA-6B Recommendations, the Navy Low Cost Advanced Capabilities (ADVCAP) Alternative Study, and a contractor provided EA-6B Alternative Upgrade Study. The GOSG determined that five upgrades were required based on comparison of the studies. The highest priority upgrade was development of a high frequency jamming capability to counter fourth generation or "double digit" Russian-made surface-to-air missile systems. The funding analysis determined that \$105 million in Future Years Defense Plan (FYDP) budget authority would be required. The next required upgrade would center around electronic receiver upgrades to complement recently acquired low frequency and proposed high band jamming transmitter improvements. Initial FYDP funding would be \$154 million with an additional \$294 million to complete the upgrade. The third priority was a

“Connectivity Upgrade” that would provide the *Prowler* with data-link ability to communicate and coordinate with space assets, national airborne electronic intelligence assets and other strike aircraft such as the F-16 and F-15. FYDP funding for the upgrade was estimated at \$124 million. The fourth priority upgrade was a structural upgrade to take advantage of two currently unused under-wing stores stations. Activating these stations would allow the *Prowler* to carry two extra HARM missiles, approximately 4000 pounds of additional fuel or two extra jamming pods for a total of 4 additional jammer transmitters. Initial FYDP funding was \$140 million with an additional \$32 million to complete. The final proposed upgrade was for expansion of the EA-6B communications jamming capability. Required Future Years Defense Plan funding was estimated at \$236 million. The grand total for upgrading all 127 EA-6Bs with the five high-priority upgrades was estimated at nearly \$1.1 billion.⁴³

Based on their analysis, the General Officer Steering Group recommended that the Joint Requirements Oversight Council (JROC) and the OSD Program Review Group endorse the following: (1) implement the “Accelerated Department of the Navy Program Objective Memorandum” as it provided for an acceptable transition schedule while drastically reducing the aircraft inventory shortfall while providing for adequate land-based support, (2) direct the Navy to act as “owner/operator” for the joint-service squadrons providing that a Memorandum of Understanding between all parties for training operations and exercises was established and Air Force personnel were

⁴³ *Ibid.*, p. 26.

integrated into the joint squadrons and COMVAQWINGPAC staff, and (3) that the identified warfighting upgrades be implemented as budget resources allowed.

The GSOG briefed the Joint Requirements Oversight Council on June 26, 1995. The JROC recommended the following directives:

- 1) That 5 new joint-service EA-6B squadrons consisting of four aircraft each. One Marine Corps *Prowler* squadron would be included into the rotation for a total of six squadrons in the JSEAD mission area. This would allow the squadrons to cover two simultaneous land-based deployments using a 2:1 PERSTEMPO.
- 2) The EF-111 would be retired in fiscal year 1997, and would not be extended as earlier proposed by the Air Force.
- 3) Support shortfalls would be experienced in the area of intermediate level capability and mission planning systems during the first year, but would be funded for in following years.
- 4) Funding for 24 SDLMs would be provided in fiscal year 1997. However, 12 SDLMs would be performed in fiscal year 1996 with 12 more in fiscal year 1997.⁴⁴

On July 18, 1995, the Joint Staff Force Structure, Resources and Assessment Directorate (J8) staff briefed the Defense Resources Board (DRB) accepted the JROC recommendations and GSOG Accelerated Navy POM option and forwarded this recommendation to the Office of the Secretary of Defense. Vice Admiral William Owens, Vice Chief of the Joint Chiefs of Staff and Chairman of the JROC, instructed his staff to perform a electronic

⁴⁴ Boe, J. R., LCDR, USN, COMNAVAIRPAC EA-6B Requirements Officer, "Point Paper on the EA-6B/EF-111A Mission Transition Issue," July 18, 1995 and Message from Roger A. Pierce, CAPT, USN, COMVAQWINGPAC to Robert J. Spane, VADM, USN, COMNAVAIRPAC, dated July 17, 1995.

warfare mission assessment to examine the funding requirements for the warfighting upgrades recommended by the GOSG.⁴⁵

By mid-July 1995, the process and plan for consolidation of the JSEAD mission had finally solidified and plans for funding and logistics were well underway. Interestingly, official direction from the Chief of Naval Operations had still not been issued. This was now more than a simple administrative inconvenience as other defense agencies were becoming involved in areas of programming, budgeting, logistics and personnel, but could not obligate requisite budget authority to provide for the mission consolidation.⁴⁶ Finally, on September 3, 1995, nearly one year after the initial planning for the Navy assumption of the Joint Suppression of Enemy Air Defenses for the Department of Defense, Chief of Naval Operations Admiral Jeremy Boorda, issued direction to COMNAVAIRPAC and COMVAQWINGPAC to establish five Joint-Service Expeditionary Squadrons.⁴⁷

⁴⁵ Message from Al Miller, CDR, USN, Chief of Naval Operations Staff, EA-6B Requirements Officer (N88OC3), to Brent M. Bennitt, VADM, USN, Director Aviation Warfare Division, Chief of Naval Operations, July 18, 1995.

⁴⁶ Message from Roger A. Pierce, CAPT, USN, COMVAQWINGPAC to Robert J. Spane, VADM, USN, COMNAVAIRPAC, dated July 17, 1995.

⁴⁷ Interview with LCDR Ken Scruggs, USN, Joint Operations Staff, COMVAQWINGPAC, August 12, 1996.

C. FINAL MEMORANDUM OF AGREEMENT: ADDRESSING JOINT ISSUES

On March 25, 1996, the final Memorandum of Agreement between the Joint Chiefs of Staff, U.S. Navy, U.S. Marine Corps, and U.S. Air Force was issued. The MOA satisfied direction in Program Decision Memorandum (PDM) I, dated August 18, 1995. The purpose of the Agreement was to provide for, "...mutually agreed procedures concerning operational and training scheduling, inter-Service aircrew augmentation, and employment of tactical jamming aircraft."⁴⁸ The MOA was to become effective upon the approval of all services involved and was subject to triennial review, modification or termination. The Agreement placed Cognizant Agent responsibility on the Joint Staff Director for Operations and Operational Deputies of each service. Three main areas of concern are addressed by the MOA: (1) Operational and Training Scheduling, (2) Inter-Service Aircrew Augmentation, and (3) Employment of Tactical Jamming Aircraft.⁴⁹

1. Operational and Training Scheduling

For purposes of scheduling the joint-service squadrons, a semi-annual long-range planning conference was to determine planned deployments, training, test and evaluation, and various exercises based on USCINACOM and USCINCPAC requirements. COMVAQWINGPAC was identified as the

⁴⁸ "Memorandum of Agreement Between the United States Navy, United States Marine Corps, United States Air Force, and the Joint Staff on EA-6B Support," Version 6.0, March 25, 1996, p. 1.

⁴⁹ Ibid.

responsible agency for training and test support. Additionally, Headquarters Marine Corps (HQMC) was to maintain final approval and coordination authority for the scheduling of Marine *Prowlers*. The Air Force also agreed to provide EF-111 assets to the maximum extent possible to cover other test, training and operations until the *Raven* is retired in mid-1997.

2. Inter-Service Aircrew Augmentation

In the area of inter-service aircrew integration, seven issues regarding training, manning and funding were addressed. First, the Air Force intends to maintain 24 EA-6B aircrew (6 pilots and 18 ECMOs) in the *Prowler* program at all times. This number equates to one USAF crew consisting of a pilot and 3 ECMOs in each of the joint-service squadrons and one crew in training at VAQ-129. The Agreement does not intend to “cap” the number of aircrew in the joint program but, simply identifies a minimum. The MOA also limits the number of field grade (O-4) officers to one in three. The second area addressed training issues. All Air Force crews that report to VAQ-129 are to have completed joint undergraduate pilot or navigator training and all ECMOs will have attended either USAF Electronic Warfare Officer School or Joint/Navy EWO/ECMO training at Naval Technical Training Center Corry Station in Pensacola, Florida. Pilots are required to attend joint undergraduate training including initial carrier qualification. The next issue reemphasized that Air Force crews must be qualified in the complete range of EA-6B training to include carrier qualification in the *Prowler*. The fourth item concerned coordination between the Navy and the Air Force liaison officer assigned to the Joint Operations Staff at the Wing. The liaison officer, currently a Lieutenant Colonel, is

responsible for coordinating an even flow of Air Force aircrew into the community. The Liaison Officer's responsibilities range from planning for inbound permanent change of station (PCS) personnel to their final assignment to one of the Joint-Service Expeditionary Squadrons. The fifth area directed the Navy as responsible for funding all training and associated costs for USAF aircrew and assimilation into the fleet. This responsibility also includes funding for all costs associated with deploying Air Force personnel as part of Navy operations. The Air Force is to be responsible for all costs incurred in service PCS moves and USAF specific professional development training.

The next item concerned leadership opportunities within the squadrons and the Wing itself. The Navy is responsible for ensuring that all field grade officers are given equal consideration for commanding officer, executive officer and department head billets. The cognizant authority for this decision will remain with the Navy boards and personnel that have traditionally determined these positions. The same direction applies to USAF officers assigned to COMVAQWINGPAC. The final item maintained the authority to remove Air Force students from the training syllabus who fail to meet requisite standards with the Commanding Officer of the Fleet Replacement Squadron, VAQ-129. The MOA required that the USAF liaison officer be consulted prior to student removal from the training pipeline.⁵⁰

⁵⁰ Ibid., pp. 3-4.

3. Employment of Tactical Jamming Aircraft

To ensure that the EA-6B is optimally employed in the support of training and operational evolutions specific to JSEAD, the Memorandum of Agreement detailed specific responsibilities and relationships between the services and cognizant agencies within each service in the areas of doctrine, tactics, training, infrastructure, maintenance support, budgeting and aircraft inventory management. The first area of concern was doctrine. With the renewed battle over roles and missions and the increased emphasis on jointness, doctrine has fallen under intense scrutiny. Even Navy traditional opposition toward doctrine has faded with the issuance of "Forward...from the Sea." The MOA requires that the Department of the Navy issue EA-6B tactics for the support of joint operations to the CINCs as quickly as possible. To aid the Navy in accomplishing this task, the Agreement directed the Air, Land, Sea Application (ALSA) Center to develop a joint-service tactics, techniques and procedures (TTP) manual. This document, entitled "J-Prowler," will be distributed this year. Once the services approve and adopt the publication, the EA-6B Tactics Manual (TACMAN) is to be updated to reflect the *Prowlers* new role in the joint arena.

On the issue of tactics, the MOA directed the ACC to assist the Navy Electronic Combat Weapons School (ECWS), the Naval Strike Warfare Center (NSWC), and the Marine Aviation Weapons and Tactics Squadron ONE (MAWTS-1) in integrating USAF electronic combat tactics and training into their various academic and flight training syllabi. Additionally, the Navy and Marine Corps were tasked with assisting the various Air Force

Operational Commands (i.e. ACC and Pacific Air Forces) and the USAF Fighter Weapons School (USAFWS) in incorporating EA-6B specific capabilities and employment considerations into their operational planning and training processes. Also, the MOA instructs ECWS and USAFWS to develop a mutual relationship in developing joint training events to enhance *Prowler* interoperability with other forces.

The Air Force and Navy were instructed to integrate the EA-6B into the Air Force Force Generation Plans (FGP) 100 and 200 by the end of the fiscal year. Force Generation Plans 100 and 200 delineate timelines for rapid deployment of forces. They provide a single source plan that units can train to, and generally represent worst case scenarios. The Air Force Inspector General also uses the FGPs to evaluate the ability of assigned units to meet these rapid deployment schedules. The amended FGPs are intended to ensure that the joint squadrons can deploy along the same timelines as other Air Force units.⁵¹

To determine that the joint squadrons will be assimilated seamlessly into Air Force composite wings during land-based deployment, the MOA tasked Commander, Naval Air Systems Command (NAVAIRSYSCOM), HQMC Aviation Logistics Support (ASL), Chief of Naval Operations Staff, and Headquarters ACC Logistics, to develop a joint Aviation Logistics MOA that will identify the minimum support required of land-based sites.

Maintenance support issues are addressed by requiring the Marine Corps to maintain its 60-day maintenance support packages, and the Navy to

⁵¹ Interview with Ronald Rivard, Lt Col, USAF, Joint Operations Staff, COMVAQWINGPAC, NAS Whidbey Island, August 8, 1996.

provide a minimum of two Peculiar Contingency Support Packages (PCSP) containing support equipment, AVCAL, IMRL, and intermediate level "vans" and all personnel necessary to provide such support. The PCSPs were part of the POM submission forwarded by the JROC to the OSD for programming and budgeting.⁵² The first of these packages will be available by the first quarter of fiscal year 1997 and the second will be operational by the third quarter of fiscal year 1998.⁵³

Planning, programming and budgeting for the EA-6B will continue to be managed by the Department of the Navy. A minimum of one USAF liaison officer will be assigned to ensure Air Force requirements are considered in all funding evolutions. Additionally, the MOA requires the Navy to take all necessary steps to ensure that increase to the agreed upon Primary Aircraft Inventory of 104 EA-6Bs will be completed by October 1, 1997. The MOA further directs the Navy to provide a detailed plan of action and milestones for the accomplishment of this goal within 45 days of approval of the MOA. Additionally, the Navy is required to advise all parties of any delays or changes in budgeting or the overall consolidation process that will affect increase to the 104 *Prowler* PAI.

The final direction contained in the Agreement requires the Joint Staff Deputy Director for Current Readiness and Capabilities (J38) to provide

⁵² See: GOSG, p. 23 and Miller, message dated July 18, 1995.

⁵³ Memorandum of Agreement, March 1996, p. 5.

periodic updates on consolidation progress to each of the services on November 1, 1996, March 1, 1997, September 1, 1997 and by specific request thereafter.

D. DEVELOPMENTS IN THE CONSOLIDATION PROCESS FROM APRIL TO AUGUST 1996

Even though advancement towards complete consolidation of the electronic warfare mission has progressed steadily since the promulgation of the final version of the Memorandum of Agreement, the Agreement itself has not been approved. Apparently the MOA is being "staffed" for continued analysis within the Office of the Chief of Staff of the Air Force.⁵⁴ The primary reason for the delay is the recent clash between the Navy and the Air Force over Navy admission that it may not reach the 104 EA-6B Primary Aircraft Inventory by the October 1, 1997 deadline as required in the Memorandum of Agreement.⁵⁵ However, other aspects of the consolidation have progressed steadily, while others have actually advanced well beyond the established timeline. This section will discuss developments from April 1996 to date to provide the status of the consolidation up to the completion of this thesis.

⁵⁴ Interview with Lt Colonel Ronald Rivard, USAF, August 8, 1996.

⁵⁵ Holzer, Robert, "U.S. Air Force Slams Navy EW Progress; Claims Inaction Could Waste \$133 Million," *Defense News*, 11:26, July 1-7, 1996, p. 1.

1. Joint-Service Expeditionary Squadron Establishment Timeline and Progress

The original timeline for establishment or “standing-up” of the joint squadrons was identified in July 1995. The timetable was as follows:⁵⁶

| <u>Squadron</u> | <u>Stand-up Month</u> |
|----------------------------|-----------------------|
| VAQ-134 “Garrudas” | October 1995 |
| VAQ-133 “Wizards” | April 1996 |
| VAQ-137 “Rooks” | October 1996 |
| VAQ-142 “Grim Watchdogs” | April 1997 |
| VAQ-128 “Golden Intruders” | October 1997 |

This schedule experienced many revisions agreed upon by the Air Force which pushed forward establishment of each squadron considerably. However, the Navy returned to the original schedule and VAQ-134 was re-established as the first Joint-Service Expeditionary Squadron in October of 1995. VAQ-133 was commissioned in March, 1996 prior to the distribution of the Memorandum of Agreement and one month ahead of schedule. Plans are presently underway for VAQ-137 to activate in October 1996. In a change from the original plan of action, the “Rooks” will replace the Marine Corps EA-6B squadron currently attached to the USS GEORGE WASHINGTON Carrier Air Wing as a fleet squadron. The Marine Squadron will consequently be made available for deployment in support of USAF contingency operations.⁵⁷

VAQ-134 has recently deployed to MCAS Iwakuni, Japan for a six month tour. The Marine Corps has subsequently provided their EA-6Bs for

⁵⁶ COMVAQWINGPAC message to COMNAVAIRPAC, dated July 17, 1995.

⁵⁷ Interview with Lt Col Rivard, August 8, 1996.

operations in support of Operation Joint Endeavor at Aviano Air Base, Italy. The VAQ-134 deployment is significant since the squadron was not originally intended for operational deployment until late June 1997. VAQ-133 is slated to relieve the "Garrudas" at MCAS Iwakuni, in late November 1996--nearly two years ahead of schedule. According to Lieutenant Colonel Ronald Rivard, the current USAF liaison officer at COMVAQWINGPAC, the remaining two joint squadrons, VAQ-142 and VAQ-128, are still expected to stand-up on time.

2. USAF Aircrew Integration and Deployment

The training of Air Force pilots and Electronic Countermeasures Officers has been touted by some as an enormous success.⁵⁸ The first crew of Air Force officers graduated from the training program at VAQ-129 on June 6, 1996. These officers have been assigned to VAQ-133 and will deploy with the squadron in late 1996. One of the officers, an Air Force Major, is currently filling the position of Assistant Operations Officer for the "Wizards" and is expected to assume the duties of Operations Officer—a department head billet—in the near future. The other officers, Captains, have been assigned to various O-3 level billets within the squadron including the Electronic Warfare department.⁵⁹ The next graduating class of USAF aircrew will be assigned to VAQ-134. Current plans are for the next field grade officer to be assigned as a "plank owner," an original member of the squadron, with VAQ-142. This officer will be instrumental in the pre-commissioning aspects of establishing a new

⁵⁸ "Combined USN/USAF EA-6B Training Program Successful," *Air Force News Service*, May 29, 1996.

⁵⁹ Interview with Lt Col Rivard, August 8, 1996.

unit. As per the Memorandum of Agreement, all USAF officers assigned to the joint squadrons will be given equal opportunities to hold any billet within the command.

On July 1, 1996, an EA-6B *Prowler* piloted and manned entirely by Air Force aviators, landed on the aircraft carrier, USS CONSTELLATION (CV-64). Chairman of the Joint Chiefs of Staff General John Shalikashvili praised the Navy and Air Force cooperation at NAS Whidbey Island which made the event possible.⁶⁰

3. Air Force Interoperability Issues

There are two major milestones towards integration of Navy managed EA-6B squadrons into Air Force operations. The first milestone, outlined in the MOA is to integrate the joint squadrons into the Air Force Force Generation Plans. This milestone is required to be completed by the end of fiscal year 1996. This phase of the consolidation is well on-track and expected to be completed by the deadline. Another phase of interoperability that was not specified in the MOA is integration of the joint squadrons into the Air Force Time-Phase Force Deployment (TPFD) plan. This plan specifies logistical requirements that determine precedence and airlift considerations for Air Force deployments to forward areas. An air force enlisted logistician has been assigned to the COMVAQWINGPAC joint operations staff to address this difficult problem.⁶¹

⁶⁰ Watkins, Steven, "Air Force Crew Makes History," *Air Force Times*, 57:3, August 19, 1996, p. 13.

⁶¹ Interview with J. Bejarano, Tech Sergeant, USAF, Logistics Journeyman, COMVAQWINGPAC Joint Operations Staff, NAS Whidbey Island, April 17, 1996.

Again, progress is being made and integration into the TPFD is nearing completion. The "J-Prowler" joint doctrine and tactics publication, also required by the MOA is also on schedule and nearing completion.

4. Funding Problems with Establishment of VAQ-128

In early July 1996, Air Force Chief of Staff General Ronald Fogleman sent a memorandum to General Shalikashvili indicating his concern that the Navy was not placing high enough funding priority on fielding the last five of the 104 EA-6B PAI.⁶² Concern over the inventory shortfall was identified when the Navy fiscal year 1998 Program Objective Memorandum submission did not include funding for the last four aircraft to be assigned to VAQ-128.⁶³ According to Rear Admiral John Luecke, Director of Strategy and Policy on the CNO staff, the funding shortfall of approximately \$136 million occurred because the initial transfer of \$500 million from the Air Force to the Navy was insufficient to field the 20 aircraft agreed upon.⁶⁴ Air Force officials requested a Joint Staff "tank session" to include the Air Force Staff and Navy staff to resolve the problem, threatening to delay retirement of the remaining 12 EF-

⁶² Fulghum, David A., "Bosnia EW Coverage May Suffer From Rift," *Aviation Week and Space Technology*, 145:4, p. 29, July, 22, 1996.

⁶³ Holzer, p. 1.

⁶⁴ Holzer, Robert, "Navy: EA-6B Program is Ahead of Schedule," *Defense News*, 11:28, July 15-21, 1996, p. 8.

111s through the end of fiscal year 1999.⁶⁵ The estimated cost of depot maintenance and operations for the *Raven* service extension was estimated between \$103 and \$133 million dollars.⁶⁶

In late July, Paul Kaminski, Undersecretary of Defense for Acquisition and Technology, directed the Navy to reexamine its funding priorities for the *Prowler*. In a July 23, 1996 memorandum to the Office of the CNO, Mr. Kaminski stated:

With the EA-6B becoming the department's sole support jamming platform in 1999, I believe a review is necessary to ensure a solid program is in place to maintain the readiness of the EA-6B and to upgrade its warfighting capabilities to counter the current and projected threats.⁶⁷

On August 7, 1996, the issue was apparently resolved when the Chairman of the Joint Chiefs of Staff assured General Fogleman that the funding problem for the final four aircraft would be resolved and directed the Chief of Staff to stop all plans for extending the *Raven* retirement deadline.⁶⁸ The Navy is currently exploring funding solutions to be submitted for budget consideration in the fiscal year 1998 Navy budget. COMVAQWINGPAC has submitted a "facts and justification" message to the CNO via COMNAVAIRPAC

⁶⁵ Fulghum.

⁶⁶ Holzer, "U.S. Air Force Slams Navy EW Progress."

⁶⁷ Holzer, Robert, "Kaminski Joins U.S. Navy-Air Force Spat Over EA-6B," *Defense News*, 11:30, July 29-August 4, 1996, p. 6.

⁶⁸ "US Navy Prowlers Will be Funded, USAF Told," *Janes Defence Weekly*, 26:6, August 7, 1996, p. 5.

requesting approval to continue with establishment of VAQ-128 in October 1997 as planned.⁶⁹

An unfortunate side-effect of this funding problem is to cast doubt on whether the Navy is capable of fulfilling the obligations set forth in the Memorandum of Agreement and whether the Navy is placing sufficient emphasis on upgrading the *Prowler* to meet future threats.⁷⁰

E. SUMMARY AND CONCLUDING REMARKS

This chapter provided a case study of a significant example of mission consolidation initiated since the beginning of the defense drawdown, the assumption of the electronic warfare mission for the entire Department of Defense by the U.S. Navy EA-6B *Prowler*. Historical review revealed increasing interest and developments in electronic warfare during the late 1960s as U.S. air forces suffered substantial losses to enemy surface-to-air missiles and radar guided anti-aircraft artillery in Vietnam. The first modern, dedicated tactical jamming aircraft was the Navy *Prowler* followed nearly a decade later by the Air Force EF-111 *Raven*.

The role of electronic combat in air warfare was significantly enhanced by the enormous success of both aircraft during Operation Desert Storm in 1991. However, the collapse of the Warsaw Pact and the end of the Cold War

⁶⁹ Interview with Lt Col Rivard, August 8, 1996.

⁷⁰ Ibid.

saw the beginning of the largest drawdown in U.S. military spending in fifty years as lawmakers sought the benefits of a "peace dividend." As a result of decreased funding and the need for costly system and structural upgrades, the Air Force decided to retire the EF-111 from service and rely on the Navy *Prowler* for its electronic warfare needs. Program Budget Decisions 752 and 753 officially sealed the fate of the *Raven* when funding for the EF-111 was reprogrammed to the Navy for expansion and enhancement of the EA-6B fleet.

After nearly a year of planning and negotiating, the final composition and size of the new Joint-Service Expeditionary Squadrons was agreed upon by Defense Resources Board, Navy and Air force. Without specific direction from the Office of the Secretary of Defense, the Current Operations Staff of the Joint Chiefs of Staff Operations Directorate (J33), began the process of planning and organizing the consolidation of the JSEAD mission. Several concept of operations meetings considered many options for implementing the plan. These options ranged from USAF ownership and operation of EA-6Bs to joint manning of Navy-managed squadrons. After independent studies were conducted by the Air Force Air Combat Command and a General Officer Steering Group led by the Joint Staff Force Structure, Resources and Assessment Directorate (J8), the decision to establish five joint-service EA-6B squadrons manned by both Air Force and Navy aircrew, but owned and operated solely by the Navy, was submitted to the Secretary of Defense for approval and funding.

In March 1996 a Memorandum of Agreement between the Joint Staff , the Navy, Marine Corps and the Air Force detailed specific relationships and a

plan of action and milestones required for the consolidation of the electronic warfare mission. The three main issues addressed by the MOA were operations and training, integration of USAF aircrew, and tactical employment considerations for the EA-6B the joint arena. While the MOA remains to be approved, the EA-6B community supported by the Air Force and Joint Staff has continued with the process of consolidations with enormous success.

A perceived lack of commitment of the Navy by the Air Force threatened to derail the entire process during July 1996, however intervention by OSD and the Chairman of the Joint Chiefs reemphasized the need to continue with the plan of action and funding requirements that would facilitate the retirement of the EF-111 in fiscal year 1997 and the assumption of the JSEAD mission by the *Prowler*.

The consolidation of the Air Force and Navy electronic warfare mission has not been easy. However, given the historical parochialism and fierce protection of individual service role and missions in previous decades, the overall consolidation efforts may be viewed as successful. Interservice friction similar to the Revolt of the Admirals, though a possibility, was avoided. Integration of Air Force pilots and Electronic Countermeasures Officers into traditionally all-Navy training, aircraft and squadrons may serve as a model for future consolidations. As stated by Lieutenant Colonel Ronald Rivard, the Joint Operations and Liaison Officer attached to the Navy's Electronic Combat Wing:

Our success or failure of the jamming consolidation may well prove to be a fore-runner of similar efforts...The deployment of VAQ-134 and the first graduating [Air Force] aircrew are the first of many benchmarks we anticipate setting with this joint venture.⁷¹

However, the process of consolidation is far from over and many hurdles must still be negotiated. Issues of logistics, funding and readiness are still concerns and will be addressed in the following chapter.

⁷¹ *Air Force News Service.*

V. PROMISE AND PITFALLS: ISSUES OF LOGISTICS, FUNDING AND READINESS

The previous chapter analyzed the baseline plan of action for consolidating the joint electronic warfare mission under the "ownership" of the U.S. Navy. This study will now focus on the key elements of "winning the mission." These are logistics, funding and their implications for the readiness of the sole source of tactical airborne electronic combat in the military.

The chapter is divided into four areas. The first section will address the new logistical requirements faced by the joint-service squadrons as they plan for land-based contingency operations. Section B will analyze the funding issues associated with the peculiar mission requirements of the new contingency squadrons, focusing on the Navy Flight Hour Program (FHP). Congressional action on the EA-6B for the fiscal year 1997 defense budget will also be discussed. Section C will address how the elements of logistics and funding will affect electronic attack readiness at the service level. Additionally, PERSTEMPO effects on readiness will be discussed in light of the findings in a recently published General Accounting Office (GAO) report. Finally, summary and concluding remarks will be presented.

A. LAND-BASED JOINT OPERATIONS: A RE-EVALUATION OF LOGISTICS SUPPORT

Logistics is critical to any weapon system and is required by DOD acquisition directives to be considered at the earliest stages of weapon system

acquisition.¹ Planning and managing the logistical aspects of a weapon system over its entire life cycle from initial concept to disposal is accomplished through a process known as Integrated Logistics Support (ILS).² ILS is defined by the Department of Defense as:

A composite of all the support considerations necessary to assure the effective and economical support of a system for its life cycle. It is an integral part of all other aspects of system acquisition and operation.³

Integrated Logistics Support is composed of two distinct phases. Phase I covers aspects of logistical planning and management that are performed during the acquisition of a weapon system, prior to its delivery to the end user. Phase II considers every aspect of logistics after the weapons system has been fielded and is in operational use.⁴ Phase I for the EA-6B ended in the early 1970s when the *Prowler* was introduced to the fleet. However, Phase II has continually evolved as evidenced by the numerous upgrades to the airframe and its system as well as its adaptation to the constantly expanding environment of carrier aviation.

¹ Green, Linda L., Logistics Engineering, New York, John Wiley & Sons, Inc., 1991, p. 1.

² Although the term "Integrated Logistics Support" has been replaced in the new DOD Directive 5000 series (March 15, 1996) by the term "Support Elements," ILS will be used in this thesis to maintain congruence with referenced texts.

³ From the Joint Electronic Library, via the world wide web, located at: <http://www.dtic.mil/doctrine/jel>.

⁴ Jones, James V., Integrated Logistics Support Handbook, Blue Ridge Summit, Pennsylvania, TAB Professional and Reference Books, 1987, pp. 4-5.

With the consolidation of the electronic warfare mission, the mission environment has also changed. The *Prowler* and its support functions will now be required to operate for extended periods of time away from its primary logistics support providers, the aircraft carrier and carrier air wing. This change requires that certain elements of ILS be re-evaluated to ensure that the EA-6B operates effectively in its new role.

Integrated Logistics support is composed of ten to twelve specific elements depending on the reference source. The number of elements is not as important as the need to identify all aspects of logistics support. Green (1991) identifies twelve elements of logistics essential to the successful support of a weapons system as:

- Maintenance Planning
- Manpower & Personnel
- Supply Support
- Facilities
- Training and Training Devices
- Support and Test Equipment
- Transportation
- Standardization and Interoperability
- Handling and Storage
- Technical Data
- Computer Resources
- Design Influence ⁵

⁵ Green, pp. 9-19.

Every element of Integrated Logistic Support is effected by the changing mission environment of the joint-service EA-6Bs. The first eight: Maintenance Planning, Manpower and Personnel, Supply Support, Facilities, Training and Training Devices, Support Equipment, Transportation, and Standardization and Interoperability, will experience the most significant evolutions from their current configuration. Handling and Storage, Technical Data, and Computer Resources will also require re-evaluation but their impact will not be as dramatic. Analysis of Design Influence factors will be necessary in the current and planned system and aircraft upgrades to the entire *Prowler* fleet, but are beyond the scope of this study.

Since the objective of the Joint-Service Expeditionary Squadrons is to support the requirements of the Air Force and CINCs in land-based MRCs, contingency and peace-keeping operations, analysis of the requisite changes to ILS will concentrate in that area. Currently, the Air Force is engaged in three forward deployed peace-keeping/airspace control operations. Electronic warfare assets are based at Aviano Air Base, Italy in support of Operation Deny Flight/Joint Endeavor in Bosnia, Incirlik Air Force Base, Turkey in support of Operation Provide Comfort in northern Iraq, and Dhahran Air Base, Saudi Arabia in support of Operation Southern Watch in southern Iraq. Re-evaluation of ILS elements is based on informal site surveys conducted at Incirlik and Dhahran Air Bases by representatives of the *Prowler* community in March 1995. Additionally, ILS requirements for Aviano Air Base will be determined from a post-deployment report filed by VAQ-130 in February,

1995.⁶ Each location offers different levels of support and infrastructure. In most cases, Incirlik, a large, well established and permanent Air Force Base offered the most complete levels of logistic support, while Aviano and Dhahran were considerably less capable due to their size and/or non-permanent status.⁷ The following evaluation addresses concerns in anticipation of a “worst case” scenario where logistics support for the EA-6B is not immediately available. Additionally, because MCAS Iwakuni (where the first two joint-service squadrons VAQ-134 and -133 are being deployed) has supported Marine EA-6B assets for many years, ILS requirements at that base have not been considered. It should be noted that Marine Corps corporate knowledge in land-based operations is being used in planning for many ILS evaluations.⁸

1. Maintenance Planning

The Maintenance Planning element of ILS addresses the process conducted to develop and implement maintenance concepts and requirements for the system’s life cycle.⁹ When the *Prowler* was first developed, the maintenance concept was designed to include unique maintenance requirements associated with carrier operations such as stresses involved in catapult launches and arrested landings, and maintenance evolutions being

⁶ Sources: “VAQ-130 Detachment 1 Report,” dated February 2, 1995; “Incirlik Air Force Base Site Survey,” dated March 17, 1995; and “EA-6B Dhahran Bed Down Site Survey Results,” message from VAQ-131 dated March 28, 1995.

⁷ Ibid.

⁸ Interview with Lt Col Ronald Rivard, USAF, March 26, 1996.

⁹ Green, p. 12.

performed in cramped spaces on rolling seas. The maintenance plan must be re-evaluated for extended shore-based operations where these elements of maintaining aircraft are not as significant. However, other maintenance factors take on considerably more weight. For instance, normal carrier-based flight cycles are between one and three hours in duration. Shore-based requirements at the three sites surveyed can be as long as six to eight hours. *Prowlers* assigned to USAF contingency operations will be expected to support a significantly larger number of strike aircraft and evolutions, thereby increasing the total number of daily flights for each aircraft. Not only will this increase the quantity of maintenance required by each aircraft, but it will drastically reduce the availability of these aircraft for preventative and corrective maintenance evolutions. Maintenance regulations differ between the two services also. What might be acceptable for Air Force units may be specifically against Navy procedures such as aircraft “tie down” procedures during high power “turns” for engine maintenance.¹⁰

As mentioned in the previous chapter, the Air Force uses two levels of maintenance (Operational and Depot) while the Navy uses three levels of maintenance. The intermediate level of maintenance is supplied by the carrier Aircraft Intermediate Maintenance Department (AIMD) when deployed with the air wing. Without the carrier, the EA-6B squadrons will have to supply their own intermediate level maintenance facilities. Due to the age of the *Prowler* and the original maintenance concept during Phase I of ILS,

¹⁰ Incirlik site survey and Aviano Detachment Report.

elimination of intermediate level maintenance is not possible.¹¹ The Marine Corps has used mobile Intermediate Maintenance Activity (IMA) "vans" to provide intermediate level support for many years, however, their vans are necessary for supporting Marine *Prowler* squadrons and are not available for permanent loan to the joint squadrons. Fortunately, funding has been programmed for the acquisition of three sets of IMA vans for the joint squadrons. However, this is going to require additional personnel with the required intermediate level training.

2. Manpower and Personnel

This aspect of ILS deals with the identification and selection of operations and maintenance personnel with specified skills to operate and maintain the weapon system over its life cycle.¹² This element also includes properly equipping these personnel to fulfill their assigned functions. This aspect of ILS has been extremely difficult to meet as the establishment of the joint-service squadrons was initiated during the reduction in force resulting from the post-Cold War defense drawdown.¹³ The Memorandum of Agreement highlighted specific requirements for the manning of the joint squadrons. Each squadron is required to have at least one crew of Air Force aviators. Additionally, maintenance personnel for the joint squadrons will be Navy

¹¹ Electronic Warfare Associates, "Q and A for Assumption of Air Force Mission," untitled facsimile dated March 22, 1995.

¹² Green, p. 13.

¹³ Interview with Kenneth Scruggs, LCDR, USN, Joint Operations Manning Requirements, COMVAQWINGPAC, NAS Whidbey Island, March 29, 1996.

enlisted and non-commissioned officers. While this will provide many beneficial results such as ease of integration into Air Force operations, the mixture of Navy and Air Force personnel may result in other administrative and organizational difficulties. Responsibility for handling administrative matters such as annual "fitness reports" for Air Force officers must be addressed. Also, temporarily assigned duties to areas such as base/flight-line security, food services and base infrastructure for enlisted personnel must be considered and planned.

Equipment and uniform requirements are different for shore-based and shipboard operations. While the necessity for "float-coat" life preservers will not be an issue, chemical warfare gear and damage control equipment are drastically different between the two environments. Aircrew flight equipment is also disparate between the services. All Air Force aircrew must be outfitted with Navy flight harnesses, survival vests and "G-suits" that may not integrate well with land-based chemical warfare clothing requirements.¹⁴

3. Supply Support

Supply support encompasses all management activities involved in determining the acquisition, storage, issue and disposal of secondary items.¹⁵ This includes providing for initial procurement and replenishment of supplies. This is an area that will require extensive re-evaluation as the joint-squadrons deploy to Air Force dominated installations. Without aircraft carrier aviation

¹⁴ Interview with Lt Col Ronald Rivard, USAF, March 26, 1996.

¹⁵ Green, p.14.

supply departments, the joint squadrons will be disconnected from their normal logistics pipeline. All three locations considered the use of the NAS Sigonella, Sicily supply pipeline as advantageous to supply support considerations. The Air Force on the other hand, relies on multiple logistics flights each week that originate from Dover Air Force Base, Delaware to provide supply support and replenishment. Without the aircraft carrier to support their supply needs, the joint squadrons will most likely be forced to rely on a combination of larger initial supply load-outs when they deploy, and initiating logistics flights from either NAS Whidbey Island to Dover AFB or from Mchord AFB (near Whidbey Island) to Dover. If naval supply resources are located within the area, there may also be the opportunity to tap into their supply pipeline as is the case with NAS Sigonella.

Another concern not often associated with the shipboard environment is customs. Regular replenishment from support/supply ships precludes the need for customs. However, each host nation has different requirements for bringing supplies and equipment into the country. This factor is further complicated when dealing with ordnance and hazardous materials.

Another area that must be evaluated is the accounting systems that the Navy and Air Force use for supplies. The Incirlik site survey team recommended the conversion of Navy Stock Numbers (NSNs) to the Air Force equivalent, if possible, in order to integrate the Navy and Air Force supply pipelines for common items. Another problem identified by the VAQ-130 detachment to Aviano was the inability for the Navy squadron to establish fuel accounts at the Air Force installations due to incompatible systems. Instead,

VAQ-130 used “fuel cards” which are a type of debit card to purchase fuel from the Air Force. Although this provided a means of purchasing fuel, it is also labor and paperwork intensive.

4. Facilities

Facilities include the permanent or temporary real property assets necessary to support the weapon system and associated support functions and personnel. Facilities management focuses on determination of types of facilities, required improvements, space and environmental concerns, and equipment.¹⁶ This has been a major concern since the beginning of the consolidation process. Each site provided different levels of suitability and availability of facilities from maintenance hangers and supply storage facilities to operations and administrative spaces to billeting for aircrew and maintenance personnel. As with the carrier environment, space and facilities are at a premium, but in different ways. Shipboard, the efficient use of facilities is a must, and every function of a squadron is assigned a space to perform their specific duties based on physical space needs. The same holds true for Air Force installations, however, weather, distance and host-nation restrictions play an additional role in the allocation of facilities. Furthermore, internal and external security concerns are far less critical for a ship at sea. With a mission that deals heavily with Top Secret and compartmentalized information, the joint squadrons are faced with ensuring that adequate security is available for mission support systems, classified publications and software.

¹⁶ *Ibid.*, p. 17.

Aircraft carriers are often likened to "floating cities" that produce their own electricity, potable water, food and lodging. Production and medical/dental facilities are also within the confines of the "city." This does not necessarily hold true for shore-based installations. Each location has varying assets in terms of these functions. Availability of mission critical production facilities such as hydraulic, avionics, ordnance and airframe "shops" depend of the degree of commonality between the services. Because of the afore-mentioned lack of an intermediate level maintenance support function, many of the services Navy squadrons are used to are simply not available. These shortfalls must be identified early and procedures, equipment and mobile facilities must be in place to fill in the gaps.

5. Training and Training Devices

This element of ILS applies to the processes, procedures, techniques, training devices, and equipment necessary to properly train personnel to operate and maintain a weapon system. Most of the training facilities and devices will not be affected by the addition of the joint-service squadrons since the infrastructure at NAS Whidbey Island is capable of supporting the increased requirements generated by five new units. The Fleet Replacement Squadron (FRS) has been augmented with additional aircraft and instructors to meet the expanded maintenance and operational training requirements.

However, with the expanded mission environment created by the mission consolidation, several areas of training must be implemented or re-evaluated to accommodate the change. As previously mentioned, chemical and biological warfare training and equipment will become of greater concern as the

Navy squadrons deploy to Air Force installations. Air Force personnel are routinely trained in this area, but Navy personnel do not normally train to this requirement outside normal General Quarters training. All air crew in the joint squadrons will be required to maintain carrier qualifications per the Memorandum of Agreement. This will be difficult to integrate into a training schedule that will also demand more Air Force specific training such as the Air Force "Red Flag" exercise at Nellis AFB, Nevada. Other training evolutions such as low-level flight and night field carrier landing practice (FCLP) are subject to host nation restrictions at different locations such as Incirlik.¹⁷

Other training requirements result from forward deployment to foreign countries. As noted in the previous section, facilities are often separated by considerable distance and require ground transportation. Drivers for these vehicles are provided organically from within the unit. This requires many personnel to receive armed forces drivers licenses from the host nation. Some locations such as Aviano require that special licenses be issued for buses, heavy trucks and forklifts. All these licenses require additional training and expense in terms of Operations and Maintenance funds as well as time. Ordnance training for Aviation Ordnancemen in the joint squadrons will have to be expanded to include assembly of HARM missiles (an intermediate level maintenance skill) since missiles are delivered to Incirlik and Dhahran in "coffin" containers and require further assembly prior to loading. Shipboard, missiles are assembled by the AIMD ordnance personnel when required.

¹⁷ See: Incirlik site survey.

Additionally, the Navy and Air Force have different certification requirements for personnel authorized to handle ordnance. A method of equating the two systems must be identified and implemented.

6. Support Equipment

Support equipment (SE) includes all equipment (mobile or fixed) required to support the operation and maintenance of a weapon system. This includes equipment starting units, tools, calibration and test equipment.¹⁸ Many of the SE assets used by the Navy and Air Force are compatible such as HARM missile test sets, avionics cooling units, and high pressure air "blowers" for starting aircraft engines. Others, such as electrical power units for starting aircraft and supplying ground power to avionics, are not directly compatible but can be fitted with adapters for compatibility. However, there are still many other forms of SE such as aircraft tire and engine maintenance stands that are not available. All three reports from the proposed sites suggested using NAS Sigonella as sources for Navy SE, but sources of support equipment must be identified for contingency operations outside of Navy specific pipelines. Additionally, there are certainly limits to the level of support and quantity of SE that can be provided by installations like Sigonella. Another concern is maintenance of support equipment. Standard Navy EA-6B squadrons do not normally have personnel trained or certified to perform preventive and corrective maintenance on support equipment. This requirement will add to the manpower and training elements of integrated logistics support.

¹⁸ Green, p. 14.

7. Transportation

This element of ILS focuses on required modes and capacity of various forms of transportation for the weapon system, supplies, support equipment and personnel.¹⁹ This is a considerable departure from standard Navy logistical considerations. Normally, when an EA-6B squadron deploys with its Carrier Air Wing (CVW), supplies, support personnel and excess aircrew are airlifted to the port facility where the carrier is based and simply “walk on.” The aircraft wait until the carrier is at sea and fly aboard. Once the air wing is assembled on the carrier, the ship deploys to its designated station as an entire unit. With shore-based squadrons, the process of deploying the unit to its “station” must be done through airlifts using Air Force Air Mobility Command transports and “TransPac/Lant” flights for the aircraft supported by Air Force KC-135 and/or KC-10 airborne refueling aircraft configured for Navy aircraft. This method has several implications. First, the amount of supplies and support equipment must meet very exact standards as outlined by the Air Force Time Phased Force Deployment (TPFD) plans. Deviation from these standards can result in essential supplies and equipment being left behind for up to 30 days.²⁰ This also implies that the amount of equipment and supplies in initial deployment may be severely limited. Finally, there is the costly, exhaustive and maintenance intensive trans-oceanic flight to the deployment area. When aircraft finally arrive at the installation they will undoubtedly require

¹⁹ Ibid., p. 18.

²⁰ Interview with Tech Sergeant J. Bejarano, USAF, April 17, 1996.

significant down time for corrective maintenance. Fortunately, the Air Force is well versed in these evolutions and personnel are already involved in integrating the new squadrons into the TPDF and Force Generation Plans. The ILS element of Packaging and Handling, which includes the resources, processes, procedures, and methods required to ensure the system and supply support are handled and stored properly, will also be re-evaluated as part of this process.²¹

8. Standardization and Interoperability

This aspect of Integrated Logistics Support applies to many of the elements listed above and also ensures that the weapon system fits within established parameters for effective operation, employment and maintenance.²² This element also applies to doctrinal and training issues. As outlined in the Memorandum of Agreement, steps are currently being taken to ensure that Air Force tactics and training are adapted to EA-6B capabilities and limitations. Additionally, a joint-employment doctrine is being developed to provide a common reference for both the Navy and Air Force to train around.

The final two elements of Integrated Logistics Support are Technical Data, information in the form of publications, manuals, and schematics that aid in the proper operation, maintenance and support of a weapon system, and Computer Resources such the Tactical EA-6B Mission Planning System (TEAMS) and other mission support systems. Each of these elements can be

²¹ Green, p. 18.

²² Ibid., p. 19.

readily augmented from existing supplies or additional procurement of systems. Since they are Navy-specific items they must be included into supply support and transportation considerations.

B. FUNDING AND THE JOINT SEAD MISSION

Funding has been addressed throughout the past two chapters as a major issue in the consolidation of the electronic warfare mission. Indeed, the necessary re-evaluation of logistics support will add considerable expense to the funding requirements for the EA-6B. As identified in the case study, PBDs 752 and 753 identified a major reprogramming of nearly \$1.5 billion in budget authority away from the Air Force EF-111A program and slightly less than half that amount toward expanding the Navy EA-6B fleet. However, priorities within the Department of Defense and the Navy in particular led to a funding shortfall in the fiscal year 1998 budget submission for the final joint-service squadron, VAQ-128, that caused considerable concern within the Air Force.

1. Concerns Over Funding Priorities Within the DOD

As the Navy proceeds with its plans to assume the Joint Suppression of Enemy Air Defenses mission with the retirement of the EF-111A in fiscal year 1998, some observers, including members of Congress and the General Accounting Office, believe that the Department of Defense is not placing a high

enough priority on funding the SEAD mission.²³ In an April 1996 report to Congress, the General Accounting Office asserted that,

Despite its own analyses that show SEAD capabilities need to be improved, DOD has instead decided to place higher funding priority on other combat air power programs, such as the Air Force's F-22 aircraft.²⁴

It is also increasingly apparent that the Air Force acquiesced the electronic warfare mission in order to invest in more budget-rich emerging technologies. Mr. Clark Murdock, a deputy special assistant to the Air Force Chief of Staff said in an August, 1996 interview that General Fogleman, "...wants to be clear on what's a sunrise system and what's a sunset system as he fights for dollars."²⁵ Clearly, the nearly twenty-year old EF-111A qualifies as a "sunset" system. Still others allege that the Air Force Chief of Staff made the decision to retire the *Raven* specifically with, "...the hope of saving money that could be used for other top priorities, especially the development of the F-22 fighter."²⁶

2. Congressional Budgetary Action

In an effort to ensure that the Navy and the Defense Department attach the appropriate importance to the upgrade and expansion of the EA-6B

²³ Sperling, Michael, "Congress Urges U.S. Navy to Speed EA-6B Upgrade," *Defense News*, 11:31, August 5-11, 1996, p. 2.

²⁴ U.S. General Accounting Office, *Combat Air Power: Funding Priority for Suppression of Enemy Air Defenses May Be Too Low*, GAO/NSIAD-96-128, Washington D.C., April, 1996.

²⁵ Breen, Tom, "Air Force Works to Prepare 'New Strategic Vision'," *Defense Daily*, 192:28, August 8, 1996, p. 218.

²⁶ Watkins, Steven, "USAF Defends Decision to Retire EF-111, F-4G Fleets," *Defense News*, 11:22, June 3-9, 1996, p. 33.

fleet, House and Senate Conferees on the fiscal year 1997 defense authorization, inserted language into the defense bill that threatens to transfer funds slated in 1996 for EA-6B modifications and upgrades to the Air Force for improvements to the remaining EF-111 fleet unless a plan of action for upgrading the planes is delivered by June, 1997.²⁷ The fiscal year 1996 defense appropriation provided \$165 million for EA-6B fleet enhancements. Congressional action on the fiscal year 1997 defense authorization adds additional proof that Congress intends to continue “urging” the DOD to place priority on ensuring the *Prowler* is able to provide the necessary electronic warfare support for the military into the twentieth century. When the DOD submitted its fiscal year 1997 budget request, \$101 million was slated for upgrades and modernization of the EA-6B fleet.²⁸ However, on July 30, 1996, Senate and House negotiators delivered their 1997 fiscal year defense authorization conference report which included provisions for \$201.6 million for EA-6B upgrades—a “plus up” of over \$100 million.²⁹

3. The Navy Flying Hour Program

Another area that must be addressed in regards to the funding of the Joint-Service Expeditionary Squadrons is the costs of constantly forward deploying these squadrons in support of contingency operations. Funding for

²⁷ Asker, James R., ed., “Use It or Lose It,” *Aviation Week and Space Technology*, 145:7, August 12, 1996, p. 23.

²⁸ Towell, Pat, “Retrench Warfare Flares Anew Over Clinton’s Budget,” *Congressional Quarterly*, 54:10, March 9, 1996, p. 631.

²⁹ “Clinton Expected to Approve Defense Bill,” *Aerospace Daily*, 179:22, August 1, 1996, p. 1.

Naval Aviation units is performed and analyzed using the Navy Flying Hour Program (FHP).

A considerable portion of the Navy EA-6B budget is administered by the COMNAVAIRPAC Force Comptroller through the Navy FHP. The most significant portion of the FHP is the Cost Per Flight Hour (CPH) which is the total cost of operating aircraft including fuel, parts, maintenance, etc.³⁰ Simply put, CPH is computed by summing the total cost of operating an aircraft type divided by the total number of hours flown.³¹ The primary tool used by the comptroller in determining funding for different aircraft types is the Flying Hour Projection System OP-20 Report which provides a detailed breakdown of each aircraft by Type/Model/Series (TMS).³² Unfortunately this system seldom provides a realistic representation of the costs of operating and maintaining naval aircraft. The February, 1996 OP-20 report indicates a CPH of \$2,783 for a current force complement of 40 EA-6Bs.³³ However, the Official Flying Hour Cost Report for June 1996 indicates a cost of \$3,245 per hour with

³⁰ McGarvey, Michael P., "A Comparative Analysis of the Higher Costs Per Flight Hour Observed in Forward Deployed Navy Squadrons," *Masters Thesis*, Monterey, California, Naval Postgraduate School, December, 1995, p. 7.

³¹ Ibid.

³² Interview with Jeffrey E. Malone, LT, USN, COMNAVAIRPAC Force Comptroller Division, Flying Hour Program Office, August 15, 1996.

³³ Flying Hour Projection System "OP-20 Report" versions 885 and 887, dated February 28, 1996.

a total force complement of 43.4 EA-6Bs.³⁴ The discrepancy can be attributed to variables within the Flying Hour Projection System that do not account for certain costs associated with operating naval aircraft and lags reflected by new/refurbished aircraft procurement.³⁵

In an analysis of increased costs per flight hour experienced by Navy squadrons forward deployed to Carrier Air Wing FIVE at Naval Air Facility Atsugi, Japan, Navy Lieutenant Michael McGarvey concluded that four major factors contributed to the increased costs of operating aviation units in a forward deployed status. Of those four, the two most significant cost variables were: (1) Logistics and Support and (2) Operational Tempo (OPTEMPO).³⁶ A comparison of three separate CVWs was used in arriving at this conclusion including CVW 5. The other two air wings, CVWs 11 and 15, were based in the Continental United States (CONUS). The data used in the analysis covered similar deployment cycles experienced by the three air wings from November 1992 to March 1994.³⁷ Total CPH for the forward deployed EA-6B squadron, VAQ-136, was nearly three times that of the EA-6B squadrons in the CONUS-

³⁴ COMNAVAIRPAC Force Comptroller, "Official Flying Hour Cost Report: June 1996," August 9, 1996.

³⁵ For a detailed analysis of the Navy Flying Hour Program, see: General Accounting Office, *Naval Aviation: the Flying Hour Program's Budget and Execution*, GAO/NSIAD-89-108, July, 1989. and Naval Audit Service, *Fleet Readiness Squadrons Flying Hour Program*, Audit Report 032-96, April 15, 1996.

³⁶ McGarvey, p. 43.

³⁷ Ibid., p. 19.

based squadrons.³⁸ Since the two primary explanations for this dramatic increase in cost per flight hour were logistics and OPTEMPO, it stands to reason that the joint-service squadrons will also experience higher costs per flight hour than their air wing affiliated counterparts for those same reasons.

Obviously, cost per flight hour while home-based in Whidbey Island will more closely approximate the costs per flight hour of carrier-based squadrons while stationed in Whidbey Island. Additionally, current plans to rotate the joint squadrons through carrier deployments will further mitigate cost per flight hour at the squadron level. However, considering the elevated costs envisioned with increased logistics requirements for shore-based joint operations, it follows that costs per flight hour in the *Prowler* community will increase substantially.

C. THE IMPACT OF MISSION CONSOLIDATION ON READINESS

The most significant impacts on readiness can be described in terms of logistics and funding. The first section of this chapter discussed multiple issues of logistics that will have a direct affect on the readiness levels of the joint-service EA-6B squadrons. If these squadrons do not have the benefit of logistic support tailored to meet their needs in the joint arena, then their ability to support the CINCs requirements will be negatively affected due to reduced aircraft availability.

Funding priority to ensure logistic support and aircraft system upgrades are also key to the successful accomplishment of this goal. However, critics

³⁸ *Ibid.*, p. 28.

point out that even with improvements to the EA-6B, the elimination of the EF-111A will result in a 30 percent net loss in support-jamming aircraft which will negatively impact readiness in the electronic warfare arena.³⁹ However, these critics fail to consider that the upgrades to the *Prowler* will make it a significantly more capable aircraft than the *Raven*, and that the joint squadrons can be augmented by aircraft and aircrew from CVW squadrons on shore rotation to NAS Whidbey Island.⁴⁰ They further argue that “interim” replacements for lethal SEAD (HARM delivery systems) are not as capable as the now retired F-4G Wild Weasel and will also have deleterious effects on the ability of U.S. forces to suppress enemy air defenses.⁴¹ The F-16 *Falcons* equipped with the Harm Targeting System (HTS) are not as capable as the F-4G, but the EA-6B HARM employment capabilities are superb and are a “force multiplier” since the *Raven* does not have a lethal SEAD capability. Additionally, the EF-111 lacks the communications jamming ability of the *Prowler*.⁴²

³⁹ Knowles and Lum, p. 46.

⁴⁰ The alleged 30 percent decrease is a rough estimate based on 16 EA-6Bs replacing the 24 *Ravens* that were in service at the time. With 20 EA-6Bs dedicated to the joint-service mission, that number is significantly smaller. Additionally, the total *Raven* inventory was 24 aircraft. With the establishment of the five joint-service squadrons, total EA-6B aircraft inventory will be in excess of 120 *Prowlers*.

⁴¹ *Ibid.*, pp. 49-50.

⁴² Letter from Commander, Electronic Combat Wing, U.S. Pacific Fleet to General John J. Shalikashvili, Chairman of the Joint Chiefs of Staff, March 29, 1996.

PERSTEMPO is another area that observers see as beginning to erode readiness in the electronic warfare mission. In April, 1996, the General Accounting Office presented a letter report to Congress entitled "Military Readiness: A Clear Policy Is Needed to Guide Management of Frequently Deployed Units." This report concluded that increased U.S. commitments to peace-keeping operations and enforcement of "No-Fly Zones" was having a detrimental effect on specialized units including EF-111 detachments in Bosnia and Saudi Arabia.⁴³ Although Status of Resources and Training System (SORTS) data report that overall unit readiness during the 1990s remained stable and at prescribed levels, the GAO indicated that this system, "...does not capture all the factors that DOD considers critical to a comprehensive readiness analysis, such as operating tempo and personnel morale."⁴⁴ Visits to units experiencing higher than normal deployment rates identified that morale and OPTEMPO were generally having a negative effect on readiness in those units. The report also allowed that the Air Force and Army do not enforce PERSTEMPO restrictions to the same degree as the Navy and Marine Corps which traditionally deploy at twice the rate of the other services.⁴⁵ Navy commitment to enforcing equitable PERSTEMPO may mitigate these disturbing findings.

⁴³ U.S. General Accounting Office, *Military Readiness: A Clear Policy Is Needed to Guide Management of Frequently Deployed Units*, Letter Report to Congress, GAO/NSIAD-96-105, April 8, 1996, pp. 2-3.

⁴⁴ *Ibid.*, p. 3.

⁴⁵ *Ibid.*, p. 1.

D. SUMMARY AND CONCLUDING REMARKS

This chapter has identified key issues of logistics and funding and the impact that these elements in addition to deployment rates have on readiness. With the evolving mission environment brought about by the consolidation of the tactical airborne electronic warfare mission, re-evaluation of Phase II of Integrated Logistic Support is necessary to best meet the requirements of the Commanders in Chief of the Combatant Commands. The areas that are most critical to logistics support of the land-based squadrons are Maintenance Planning, Manpower and Personnel, Supply Support and Facilities. Proper advance planning is crucial to the success of these elements. Failure to ensure adequate support in these key areas will directly impact the ability of these units to fulfill their mission requirements, which in turn will affect the overall readiness of the units themselves.

Funding for logistics and planned upgrades to the *Prowler* fleet must be given the highest priority. The Navy has risen to the challenge of assuming the JSEAD role, but without proper funding, the Defense Department may end up “snatching defeat from the jaws of victory.” Additionally, funding levels as viewed through the Navy Flying Hour Program may be underestimating the cost of providing all DOD electronic warfare assets for future contingency and peace-keeping operations. A comparison of the increased logistics and OPTEMPO costs of EA-6B assets forward deployed to Japan indicated shortfalls in the estimation of cost per flight hour.

In addition to logistics and funding concerns, decreased readiness levels in remaining Air Force electronic warfare units have been linked to higher deployment rates. Although viewed with concern by the GAO, it is assumed that strict Navy policies concerning maximum PERSTEMPO rates can mitigate these perceived decreases in readiness.

If the Navy is to successfully and smoothly assume the role as the sole provider of airborne electronic combat forces for the next decade, sincere and in-depth re-evaluation of key elements of Integrated Logistic Support must be conducted and implemented. Additionally, the Department of Defense and the Navy must give funding priority to expanding the EA-6B fleet and enhancing its warfighting capabilities. Threats from Congress to reprogram allocated funds back to the Air Force must not be taken lightly. By adhering to the directives included in the fiscal year 1997 Defense Authorization, the DOD can avoid that "threat."

VI. CONCLUSION

A. SUMMARY

This thesis has sought to develop background to assess the implications of interservice rivalry, roles and missions, and mission consolidation for logistics, funding and readiness. Interservice rivalry has been a fact of life for the U.S. military since its beginning. With the introduction of air power, the establishment of the Air Force and the "unification" of the military departments under the Department of Defense, friction between the services has often had a crippling effect on service cooperation. The roles and missions of the armed forces are being readdressed as a result of the end of the Cold War. Roles and missions defined over fifty years ago are ill suited to meet the new geo-political environment created by the collapse of the Iron Curtain.

The inability of the services to perform effectively and efficiently in combined operations led to the landmark Goldwater-Nichols Defense Reorganization Act of 1986. The Act further strengthened the power of the Chairman of the Joint Chiefs of Staff and has pushed the Department of Defense, sometimes grudgingly, down the road to jointness. As with other periods in military history, Congress began to reduce in the size of the defense budget in light of the end of the Cold War in search of a "peace dividend." To alleviate some of the fiscal pressures of the declining defense budget, the DOD has begun consolidating many missions under a single service or platform. Complying with the recommendation of the Commission on Roles and Missions

of the Armed Forces, the Defense Department decided to retire the Air Force EF-111A *Raven* aircraft and rely on the Navy to provide electronic combat support using the EA-6B *Prowler*. In order for the Navy to meet the requirements of the new mission known as Joint Suppression of Enemy Air Defenses (JSEAD), five new squadrons of *Prowlers* were established. The Joint-Service Expeditionary Squadrons are the first truly joint tactical units to evolve from the Department of Defense trend toward jointness. Each squadron will have a compliment of Air Force aviators and will deploy to land-based sites operationally controlled by the regional Commander in Chief.

The process of organizing and establishing the joint squadrons was difficult and often acrimonious. However, with positive direction from the Joint Staff (J33), the program is progressing steadily and squadrons are “standing-up” and deploying well ahead of schedule.

With consolidation comes the necessity for both services to change the manner in which they “do business.” Of primary concern are how to handle logistical problems, and funding shortfalls while still preserving readiness. It is apparent from the analysis presented in the previous chapter that logistics cannot be accomplished within the constraints of either Navy or Air Force current *modus operandi*. New methods of operating and supporting the logistics chain must be devised.

With defense dollars reduced, the DOD is being forced to do more with less. However, the adage of, “you’ve got to spend money to make money” applies in this case. The Defense Department has chosen to consolidate the electronic warfare mission as a means of saving money while preserving

military ability to provide electronic "cover" for its strike assets. Funding must be made available to upgrade the EA-6B to enable the aircraft to meet CINC and Air Force requirements. Without a clear funding priority, the fleet will not receive critical enhancements to meet proliferating threats, and electronic combat readiness will suffer.

Readiness will almost certainly be affected as the services move to arrange a suitable and effective logistics support plan for the joint-service squadrons. Additionally, PERSTEMPO for the joint squadrons will have to be closely monitored or readiness could suffer from the perspective of morale.

B. AREAS FOR CONTINUED RESEARCH

This thesis has developed nearly as many questions as it attempted to answer. This study concludes just as the first Joint-Service Expeditionary Squadron, VAQ-134, reaches the mid-way point in its initial deployment. Additionally, three more squadrons wait to be established. Therefore, areas for further research are numerous. Additional research in the following areas may prove beneficial:

- How has the integration of Air Force personnel benefitted the Joint-Service Expeditionary Squadrons in supporting land-based operations? Is there an opportunity or requirement to integrate enlisted maintenance and support personnel into the squadrons? Have interservice rivalries surfaced within the units?
- What have been the positive or negative long-term effects to overall readiness with the consolidation of the JSEAD mission? Has PERSTEMPO remained in line with Navy objectives?

- What effect has the Navy assumption of the DOD electronic warfare support mission had on costs per flight hour for the EA-6B community? Are funding levels consistent with expanded mission requirements?
- What innovations and paradigm shifts in logistics support of the joint-service squadrons have occurred? How has been the impact of the implementation of Intermediate Maintenance Activity vans on maintenance procedures?
- The first two deployments of the joint-service squadrons were not in direct support of Air Force operations. What has been the outcome of subsequent deployments in direct support of Air Force operations?

C. CONCLUDING REMARKS

This thesis focused on a case study of EA-6B Joint-Service Expeditionary Squadrons. The Navy has literally “won” the mission of electronic warfare support for the entire Department of Defense, yet nearly a year passed after the issuance of PBDs 752 and 753 before the Office of the Secretary of the Navy or the Office of the Chief of Naval Operations gave formal direction to Commander, Electronic Combat Wing Pacific Fleet to proceed with the establishment of five new joint-service squadrons. Had it not been for the proactive role played by the Joint Staff, specifically the Operations Directorate (J3) and the Force Structure, Resources and Assessment Directorate (J8), the entire program might have foundered until direct congressional action was taken. The role played by the Chairman of the Joint Chiefs and the Joint Staff is a significant example of the positive aspects of the Goldwater-Nichols Act. Prior to the enactment of the reorganization

statute, the likelihood that the Joint Staff would have taken such proactive measures is doubtful.

Interservice rivalry issues during the process of planning the consolidation were not as prevalent as one might have envisioned. In fact, interservice friction only occurred at the higher echelons of the services. When questioned about interservice rivalry at the operational level during interviews with the Operations Staff at COMVAQWINGPAC, a Navy Commander stated, "If you're looking for interservice rivalry, you're looking in the wrong place." In fact, intra-service rivalry was more of an obstacle for the "transition team" that headed the joint squadron establishment and long-range planning timeline as extensive negotiations between the Marine Corps and Navy were required to delineate roles and responsibilities.

Although the overall consolidation of the electronic warfare mission and the establishment of the expeditionary squadrons can be viewed as a success, diligence must be taken to ensure that this remains a military operation. Congressional intervention of the process can be seen in the fiscal year 1997 Defense Authorization. The joint command "nationalization" of the *Prowler* could still be an option if lawmakers are not confident in DOD progress.

Funding priorities must be made clear if the JSEAD mission is to be successful. Observers are extremely concerned about the long term affects the merger will have on readiness and the ability of the EA-6B to provide adequate electronic defense for strike assets. Without enhanced capabilities the *Prowler* will be forced to fight the battles of tomorrow with technology of the past.

System incompatibilities plagued the services during the invasion of Grenada in 1983, and steps have been taken to eliminate many of the interoperability shortfalls identified. However, as indicated in Chapter V, many interoperability issues still remain unresolved as evidenced by the different logistics and accounting systems used by the Air Force and Navy. As the military continues to stress jointness, these systems must be made compatible or replaced with a single DOD-wide system. The Joint-Service Expeditionary Squadrons are likely to be the first of many consolidations in the future. Each will be unique, yet they will all have areas of similarity. Using the lessons learned from this venture could help to ensure a smoother transition. The push towards jointness is far from over. The goal is not a few missions or units jointly manned and operated, but four services that are dedicated to cooperating and coordinating their efforts to provide the most effective national defense. As Chairman of the Joint Chiefs of Staff, General John Shalikashvili, U.S. Army, said in an August 7, 1996 interview:

It isn't just the matter of whether an Air Force crew can land on a carrier. It is whether the services can be put together into a joint warfighting team and do so that at the end of this, you end up with more than just a sum of these parts. That's true jointness.¹

¹ "General John J. Shalikashvili: Chairman of the Joint Chiefs of Staff," *Army Times*, 57:4, August 19, 1996, p. 4.

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